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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and improve the character of the service rendered to the public.

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NOTICE TO MARINERS.

DOMINION OF CANADA—ONTARIO.

REMOVAL OF WRECK OF SCHOONER "GANGES."—The wreck of the wooden schooner Ganges, sunk by collision in Lake Erie, in the track of vessels between Pelee Point and the mouth of the Detroit river, about 8 miles south of Kingsville, has been partially removed by the D. G. S. Petrel. Capt. Dunn, master of the Petrel, reports that no obstruction to navigation remains within 22 feet of the surface of the lake.

F. GOURDEAU,
Deputy Minister of Marine and Fisheries.
Department of Marine and Fisheries, Ottawa, Canada, June 8, 1899.

LIGHT-HOUSE ESTABLISHMENT,
OFFICE OF THE LIGHT-HOUSE INSPECTOR, 9TH DIST.,
CHICAGO, ILL., June 30, 1899.

GAS BUOY, STRAITS OF MACKINAC.

Notice is hereby given that the gas buoy, reported by a passing steamer as being adrift in the Straits of Mackinac, was found to be the Winslow wreck gas buoy, and in position. The U. S. tender Dahlia, which went in search of the buoy, reports that the Lansing shoal and Winslow wreck gas buoys were found in their respective positions and burning brightly.

By order of the Light House Board.

Respectfully,
C. O. ALLIBONE,
Commander, U. S. Navy,
Inspector 9th Light House District.

UNITED STATES OF AMERICA—NORTHERN LAKES AND RIVERS—MICHIGAN.

TREASURY DEPARTMENT,
OFFICE OF THE LIGHT-HOUSE BOARD,
WASHINGTON, D. C., June 28, 1899.

LAKE ST. CLAIR TWENTY-FOOT CHANNEL LIGHTS.—Notice is hereby given that, on June 13, 1899, the following described lights were established on the structures recently erected, to mark the edges of the Lake St. Clair Twenty-Foot Channel in the southwesterly part of the lake:

Lower Entrance (W. Side) Light, a lens-lantern light, fixed white during periods of 5 seconds separated by eclipses of 15 seconds, 25 feet above lake level, on a black, iron column rising from the center of a square pyramidal crib, in 19 feet of water, on the northwesterly side of the lower entrance to the channel, $1\frac{1}{10}$ miles E.N.E. $\frac{1}{4}$ E. from Windmill Point Light-House.

Lower Middle (E. Side) Light, a lens-lantern light, fixed

white during periods of 5 seconds separated by eclipses of 15 seconds, 25 feet above lake level, on a black, iron column rising from the center of a square pyramidal crib, in 18 feet of water, on the southeasterly side of the lower end of the channel, $3\frac{1}{8}$ miles N.E. by E. $\frac{1}{2}$ E. from Windmill Point Light-House, and $1\frac{1}{8}$ miles E. $\frac{3}{4}$ S. from the outer end of the Grosse Point club house dock.

Upper Middle (W. Side) Light, a lens-lantern light, fixed white during periods of 5 seconds separated by eclipses of 15 seconds, 25 feet above lake level, on a black, iron column rising from the center of a square pyramidal crib, in $17\frac{1}{2}$ feet of water, on the northwesterly side of the channel, $3\frac{1}{16}$ miles N.E. $\frac{1}{4}$ E. from Lower Entrance (W. side) Light, and $2\frac{1}{4}$ miles N.E. by E. $\frac{3}{4}$ E. from the outer end of the Grosse Point club house dock.

Upper (E. Side) Light, a lens-lantern light, fixed white during periods of 5 seconds separated by eclipses of 15 seconds, 25 feet above lake level, on a black, iron column rising from the center of a square pyramidal crib, in $19\frac{1}{2}$ feet of water, on the southeasterly side of the channel, 3 miles N.E. $\frac{1}{4}$ E. from Lower Middle (E. side) Light, and $3\frac{1}{8}$ miles N.E. by E. $\frac{1}{2}$ E. from the outer end of the Grosse Point club-house dock.

Bearings are true; miles are statute miles.

GROS CAP REEF GAS BUOY.—Notice is hereby given that, on June 5, 1899, a gas buoy, painted red and showing a fixed white light during periods of 10 seconds, separated by eclipses of 10 seconds' duration, was established in 17 feet of water, about 2 miles north-northeasterly from Point Iroquois Light-House, on the westerly end of the reef running out nearly to mid-channel and lying in the head of the St. Marys river off Gros Cap. Vessels should pass at least 500 feet to the westward of the buoy.

Bearings (true) of prominent objects from the buoy are, approximately:

South Gros Cap (Canadian) triangulation station, N.E. $\frac{3}{4}$ N.; west end Chene Island (Canadian) triangulation station, E.S.E. $\frac{3}{4}$ E.; Round Island (discontinued) light-house, S.E.; Point Iroquois light-house, S.S.W. $\frac{1}{2}$ W.

By order of the Light-House Board.

FRANCIS J. HIGGINSON,
Rear Admiral, U. S. Navy, Chairman.

CORRECTED NOTICE TO MARINERS.

(BY THE HYDROGRAPHIC OFFICE.)

LAKE ERIE—SUNKEN WRECK ABREAST OF BAR POINT LIGHT.—Information has been received that on June 3 last the lumber-laden schooner Thomas Dobbie struck a rock abreast of Bar Point light, Lake Erie, and sunk. She lies in 12 feet of water, and her stern is in the channel.

The following has since been received at the branch hydrographic office, Cleveland, from Capt. Andrew Hackett, Bois Blanc Island, Ont.:

"I saw the above notice in the MARINE RECORD of June 22nd about a wreck in the channel abreast of Bar Point light. She was not within three miles of the light, and she was outside of the red stakes at Bar Point. She struck in 12 feet of water and sank right there. I placed the Bar Point stake in 16 feet of water."

THE promoters of the Georgian Bay canal project are arranging for the official survey of the route of the canal this year in order to have more definite plans to lay before the Dominion Government. It is said that the Government has requested that the survey be made before the question of guaranteeing the bonds is finally considered. The company will endeavour to have the work completed by the opening of next session of Parliament.

TO SUBSIDIZE LAKE STEAMERS.

The *Toronto Globe* defends the proposal to subsidize a line of lake steamships on the ground that the principle involved is the same as that underlying protection and the subsidizing of the proposed fast Atlantic service. To which the *Toronto World* replies that the analogy will not hold, and states that in the case of the fast Atlantic service, the Government made the initial move. It advertised for a specific service, and everyone had an equal chance to tender. If the Government thinks a new line of lake steamships is necessary, let it advertise the fact that it will guarantee the interest on so many million dollars for the construction of the necessary vessels. In that event we may rest assured that Mr. Bertram will not be the only tenderer. Nor is the principle analogous to protection. Any individual is at liberty to take advantage of a protective tariff. The tariff is the same to all. There are no distinctions. The chief objection to the Bertram proposal is that there is no precedent or principle to support it. If the Government believes that a line of inland steamships of a certain capacity is required let it advertise the fact and ask for tenders. That is the proper way to deal with the question.

Mr. S. Crangle, a Canadian prominent in marine circles, regarding the proposition made by Mr. Bertram's company to the government to guarantee the bonds of the company to enable them to build a fleet of lake steamers, asks: Why should one steamship company be bonused, and all the others get nothing? The *Globe* says: "Who should the Government grant \$750,000 to a fast ocean steamship service and not guarantee for a commercial fleet on the lakes." There is all the difference in the world. None of the existing steamship lines will put on a fast ocean service without the cash grant of \$750,000, and even with it they are very shy of undertaking it.

Lake steamship owners have built and are willing to go on building lake steamers without any subsidy, and emphatically protest against one line being bonused in preference to others. The *Globe* further says: "Is not the whole protectionist system a system of providing aid, and why should it be condemned when it is applied to the request for guarantee of bonds for the construction of a fleet of steamships?"

It is not very hard to answer this. A protectionist system protects everyone, while the guarantee in this case is a special one, to the prejudice of all the others.

If the Dominion Government is going to bonus companies for lake steamships, let it divide the bonus up, and give equally to existing lines, and then, perhaps, Mr. Bertram may be entitled to a share.

MICHIGAN FISHING LAWS.

The taking of whitefish and lake trout is prohibited from Oct. 30 to Dec. 15, except in that portion of Lake Erie bordering on Monroe county, where the closed season is from Nov. 15 to Dec. 1.

Herring and other rough fish may be taken in pound nets from April 1 to July 15, and from Sept. 1 to Dec. 15, where it will not interfere with or catch immature whitefish or trout.

It is unlawful to have in possession any whitefish of a less weight than two pounds; any trout of a less weight than one and one-half pounds; any walleyed pike, pickerel or catfish weighing less than one pound, or any perch less than four ounces, each in the round.

Heavy fines or imprisonment, or both, is provided for a violation of any of the provisions of these statutes.

An official compilation of the game and fish laws of this state may be obtained by addressing the state game and fish warden at Portland, Mich.



CHICAGO.

Special Correspondence to The Marine Record.

The schooner D. R. Martin, Capt. Wm. Chamberlain, was dismasted by collision with the Metropolitan L bridge on Saturday afternoon.

Prof. Cleveland Abbe, of the United States Weather Bureau, Washington, speaking of the estimated 10,000 cubic feet a second as the probable outflow of the Chicago drainage canal, says the general effect on Lakes Huron and Michigan will be to increase the present outflow to about 70 instead of 67 inches annually.

Joseph Berlyheim, the well known and popular general passenger agent of the L. M. & L. S. Trans. Co., will complete his twenty-fifth anniversary in marine service this season. He has been with the L. M. & L. S. Trans. Co. twenty-three years, and their general passenger agent since 1880, and has made a great record in building up the company's passenger business.

The tugs and other property of the Dunham Towing & Wrecking Co., and Barry Brothers' Independent Tug Line, which are to go into the Great Lakes Towing Co., were inspected last week by Capt. James Davidson, shipbuilder, West Bay City; T. F. Newman and W. A. Collier, of Cleveland, who were accompanied by Harvey D. Goulder, Esq., admiralty lawyer, also of Cleveland, who was to draw up the consolidated agreements.

The marine hospital service in its last report publishes a statement made by H. F. Otto, chief engineer on a Lake Michigan steamer, expressing the opinion that the lake steamers often take aboard water for drinking purposes from the Chicago river owing to inattention to their pumps. Surgeon Sawtelle of the hospital service, commenting upon the report, says that much of the enteric fever reported from the Chicago branch of the service is due to this cause.

The United States revenue cutter Fessenden collided with the car ferry Pere Marquette last week in the straight cut at Milwaukee. The Fessenden was coming in from the lake where she had been anchored. No one was injured by the collision, although it looked as if the Fessenden was going to be badly damaged. As it was, one of her wheel boxes was only slightly injured. The car ferry should keep away from revenue cutters, nor should the Fessenden try to run down a peaceable trader when going about her own business attending to nobody.

The steamer Sachem formerly owned by Ed. Ayers of this city is not having such good fortune since she was bought by Toledo owners. The same master is on her and she is still in the lumber trade, or was, and will be again after her collision damage is fixed up and her stem straightened. It is rather strange that a master should have so marked a success in keeping clear of trouble for so these many years and then on a change of trade run butt into lumber, I was going to say, but she has nearly always been loaded with that, more or less, so I'll just make a clean collision case of it.

Lyman E. Cooley, American vice-president of the International Deep Waterways Association, says that a party of officials of the association and a dozen or more representative citizens who are interested in the deep waterways movement, will probably be organized for a trip to Canada in August, to see the opening of the Soulanges canal. The new canal is the last link in the chain of improvements that the Canadian government has been making along the St. Lawrence for a number of years. As soon as it is opened, boats drawing 14 feet of water or less can pass freely from the ocean to the Great Lakes and vice versa. This change, according to Mr. Cooley, who has studied the transportation problems of the country for many years, will have a far-reaching effect on commerce. Four of the officers of the waterways association are Chicago men.

FOLLOWING is a list of the naval and merchant steamers which the William Cramp & Sons Ships & Engine Building Co., Philadelphia, now have on their books: Battleship Alabama, U. S., 11,500 tons; battleship Maine, U. S., 13,500 tons; battleship Retvizan, Russia, 12,875 tons; cruiser Varag, Russia, 7,054 tons; steamships (not named) 2 for the International Navigation Co., 12,000 tons each; steamships Sierra, Sonoma and Ventura, for the Oceanic Steamship Co., 9,690 each; steamship for the Plant System, 6,920 tons; two steamships for the Ward Line, 5,000 tons. Total, 114,919 tons. The three steamers for the Oceanic Line are for the trade between San Francisco, Cal., and Sydney, Australia. This route can hardly be considered as a coastal one, notwithstanding the inference has been given out that the greater part of the vessels now building are not intended for the foreign trade.

DETROIT.

Special Correspondence to The Marine Record.

Repairs and alterations on the steamer St. Paul will be completed at the Orleans street yard of the Detroit Ship Building Co., some time this week.

S. F. Hodge & Co. shipped a new propeller wheel to Cleveland this week, to be placed on the E. W. Oglebay, which lost her screw on Lake Superior last week.

River Queen is the name B. W. Parker says he will suggest for the new steamer building at the Wyandotte yards of the Detroit Ship Building Co. for the White Star Line.

Capt. George McCullough, of the State of Michigan, is laid up at his home here. Capt. George Doner is in command of the Michigan during Captain McCullough's illness.

The Parker Chartering Co. has purchased the barge Lyman Casey from the Morrison estate. She will be used in the coal trade and is now being fitted out at Marine City. She carries 700 tons.

The steamer Kearsarge had a narrow escape from grounding, if nothing worse, last Sunday. When entering the river at Port Huron her steering gear became disabled and the tug Mason got hold in time to prevent her drifting ashore.

The Detroit Ship Building Company, late the Detroit Dry Dock Company, passed into direct control of the shipyard combine July 1st, the beginning of the fiscal year, with the following officers: President, Alex. McVittie; vice-president, W. C. McMillan; secretary and treasurer, M. E. Farr; consulting and designing engineer, F. E. Kirby; general superintendent, C. B. Calder.

Last week the Central Lumber Co., Saginaw, received a raft from Georgian Bay containing 4,500,000 feet, and the firm expects another raft this week. Large quantities of lumber are coming over from Canada and upper Michigan, and a few million feet from Green Bay, but the lake shipments are smaller than ever before. Local buyers take all the mills manufacture and buy largely outside.

The Navy Department has placed the Michigan at the disposal of the state from July 20 to 28 inclusive, for the instruction of the naval brigade and Adjt.-Gen. Case has just issued an order for the first battalion to take a practice cruise. The commanding officer of the brigade is ordered to assemble the battalion on board the Yantic—which vessel is to accompany the Michigan—at this city on the morning of July 20.

The Carmona has left the drydock and resumed her regular trips on Tuesday. Repairs to the St. Paul will be completed by Saturday, and the John F. Eddy, which has been undergoing repairs at the lower dock for the past eight weeks will also be finished the latter part of the week. The F. H. Prince arrived on Monday for a new spar and the J. Emory Owen will come in later to have her topmasts taken off.

It is stated that the small passenger steamer Unique is to be put in service again after being in limbo at Sarnia, Ont., on account of her debts. It is understood that the Frontier Iron Works of this city was one of the heaviest creditors, but an arrangement has been arrived at whereby she comes into the possession of an eastern syndicate. She is being fitted up and painted and will go into the excursion trade among the Thousand Islands of the River St. Lawrence and vicinity.

Capt. John C. Brown, who lost his life through the foundering of the steamer Margaret Olwill in Lake Erie on Thursday morning, was a brother of Wesley Brown, master of the steamer North West, and of George A. Brown, master of the steamer Arrow. Two other brothers are also lake captains. Capt. Brown was born at St. Clair, Mich., 34 years ago. His service on the Olwill covered a period of five seasons. William Doyle, one of the lost crew, was a brother-in-law of Capt. Brown.

It has been decided that Mr. E. S. Wheeler, formerly superintendent at St. Mary's Falls canal is to be chief assistant to Col. Lydecker, Corps of Engineers, U.S.A., with headquarters in Detroit. While stationed at Sault Ste Marie Mr. Wheeler drew especial attention to the serious problem of maintaining the lake levels and he has probably given more expert thought to this question than any other lake engineer. In his new position he will be given all opportunity to devote especial attention to the physics of the lakes and it may be confidently expected that much real good to the actual lake interests will grow out of his labors in this direction.

Mr. F. B. Dickerson, postmaster, kindly furnishes the information that during the month of June the marine post-office received 46,191 pieces of mail, and delivered 43,467 pieces, which is 33.23 per cent. greater for the month of June this year than for the corresponding month last year. The number of vessels passing during the day time was 1,535, at night 1,606, total, 3,041. The large percentage of increase of mail handled is especially notable. It can thus be seen that besides giving excellent and trustworthy facilities for handling marine mail matter, the service is of a statistical nature regarding vessel passages. Mr. Dickerson has well earned the thanks of the majority of those sailing on the lakes, as well as the good will of masters, owners, shippers, consignees and others by his expressed determination to make a valuable branch of the postal service out of the river work at this port, had Mr. Dickerson been a whit less positive in his bearing, it is quite possible that the Detroit river marine postal service might have been abandoned, or at least temporarily so.

CLEVELAND.

Special Correspondence to The Marine Record.

Joe Toth, while on his way to Toledo on the steamer State of New York, was drowned last Saturday. His home was on Madison avenue.

Ensign C. C. Fewel, U. S. N., who is now in charge of the branch hydrographic office at this port, has been promoted to a lieutenantancy under the naval personnel bill.

The steamer Arrow will give regular weekly excursions from Sandusky to Cleveland every Tuesday during the season. She leaves this port at 4:20 p. m., and Sandusky at 7:30 a. m.

W. H. Mack, manager of the Boutelle Towing Co., which was organized to operate a fleet of vessels on the coast, who was on a visit home for a few days, returned to Boston on Wednesday night.

The steamer Somerset, 173 tons gross, built at this port in 1854 now hails from New York. Her official number is 116,882. This speaks well for the way that vessels were put together here 45 years ago.

Citizens of Houghton, Mich., will present the new Bessemer line steamer Douglas Houghton, now nearing completion at the Globe works of the American Ship Building Co., Cleveland, with a United States ensign.

There is quite a lively little contest in towing at this port, and the two large companies are keeping close watch on a philistine named the Helene. The little craft, running independent, picks up quite a share of business, but it is said that her days are numbered.

A meeting of vessel owners was held at Capt. James Corrigan's office, on Friday, June 30, to protest against the removal of Donald M. Mackenzie, superintendent of the "Soo" canal. Suitable resolutions were passed, but it is thought that the political situation will have much to do with his retention or dismissal.

The dredging of the outer harbor has been commenced, under the direction of U. S. Engineer Jared A. Smith. The fund available for this work is \$75,000. Three dredges will be put at work. There has been some little murmuring about the detention on this work, but it will now be thoroughly done and completed at an early date.

The connection of Manager T. F. Newman, of the C. & B. line, with the tug combination interests, seems to occasion surprise in some quarters, but it is now learned that he was one of the principal promoters of the combine, along with James H. Hoyt and W. A. Collier. It is also understood that these gentlemen netted a handsome figure for their services to the consolidation.

Capt. E. Rathburn has "swallowed the anchor" and taken a position ashore with the Tonawanda Iron & Steel Co., Tonawanda, N. Y. Among the boats which the Captain has handled are the Santa Maria, Jessie Farwell, John F. Eddy and John Plankinton. His old associates and shipmates will no doubt be pleased to learn of his getting a position ashore and will wish him every success in his work.

The Lake Erie & Detroit River railway has issued a folder giving a lot of information concerning the big car ferry Shenango No. 1, which operates in connection with that road between Port Stanley, Port Dover, Ont., and Conneaut, O. The Shenango makes two round trips a week between Port Stanley and Conneaut, leaving the latter place Mondays and Fridays at 9 a. m., and arriving at Port Stanley at 4 p. m. Wednesdays she leaves Conneaut at 9 a. m. for Port Dover.

Rev. J. W. Malcolm, in his address at the funeral of Mrs. Hunt, drowned through the foundering of the steamer Margaret Olwill, off Lorain last Thursday, severely censured the owners of the steamer for the loss of life. The handling of the steamer was left entirely at the discretion of her master, Capt. Brown, and it is thought that the reverend gentleman could not have understood the situation or he would not have made such a statement against the owners of the steamer, who are well known residents of Cleveland.

Mr. Thos. W. Bristow, superintendent of construction at the Wyandotte yards of the Detroit Dry Dock Co., and the Cleveland Ship Building Co., for twenty years, and who has for the past year been in business for himself as a marine expert, surveyor and consulting shipbuilder, departed for the State of Michigan this week, to engage himself in the state of matrimony. Mr. Bristow's friends, and they are legion, will wish for elegant weather to prevail, so that he may convoy his consort in the pacific paths of pleasantness throughout the life-long cruise.

Capt. Willoughby, of the side-wheel steamer State of Ohio, who first sighted the wreckage of the Margaret Olwill, picked up one castaway and lost the other, is connected by family ties with the Hon. W. J. White, of chewing gum fame. Capt. Ira Mansfield, steamer Sacramento, who passed the scene of the wreck an hour or two later, is also connected through marriage with W. J. White, he launched his yawl boat and picked up three men whom Willoughby didn't sight. The ex-Congressman can probably get life-saving medals for both masters if he is so disposed.

THE steel steamer Clarence A. Black, bound from Lake Superior to Chicago with a cargo of iron ore, ran ashore on Round Island, Straits of Mackinac, on Saturday night. Tugs and lighters were immediately dispatched from Sault Ste. Marie.

BUFFALO.

Special Correspondence to The Marine Record.

The stock of the recently organized Dominion Steel and Iron Co. is being underwritten in Canada by the Bank of Montreal and the Merchants' Bank of Halifax. The portion of this stock allotted to Canada amounts to \$5,000,000, and the greater part has been taken up by prominent Canadian capitalists in Montreal and Toronto.

Word was received here on Tuesday that Capt. Henry Root late of the steamer Reynolds died at his home in Perrysburg near Toledo, on Monday. Capt. Root had a stroke of paralysis a couple of weeks ago while in charge of his boat and it was then thought that the attack would prove fatal. The Reynolds was in the Wabash R. R. line between this port and Toledo.

Since the death of Robert H. Hebard, the former general manager of the "Soo" line of boats, there has been a good deal of talk as to his successor. The selection of Mr. Hebard's son would be the logical one. He was associated with his father for several years—in fact, since his father took charge of the "Soo" line, and knows every detail of the business. He is a bright young man, and has the vessel interests at heart.

The tug trust appears to have captured Buffalo sure enough, though some of the tug owners here denied it at first. It is not a complete deal yet, but will be. The property here will be appraised. Then the two lines will be wiped out and a single office will take care of all the work. This means that the running force and office expenses will be cut down materially, for there will be required only a superintendent, a bookkeeper and a night watchman. Otherwise there will be little change. It has been possible to get the Buffalo lines into the deal only because they were not satisfied with their earnings. It is said that towing rates will not be advanced.

Capt. Hugh McIntyre, of the steamer, Ongiara, one of the Niagara Navigation Co.'s fleet, which plies between Queenstown, Lewiston, and Niagara Falls, has been summoned to appear before the magistrate at Niagara for an alleged violation of the Lord's Day Act in running on Sundays. The complainant is said to be a ferryman, who conducts his own business on Sunday, but claims the privilege as a ferryman, the captain will contest the case on the ground, among other things, that the Ontario Lord's Day Act, which attempts to prohibit Sunday excursions, is not within the competence of the Ontario Legislature; that the Lord's Day Act was in force at the time of Confederation, and cannot be extended by the Provincial Legislature; and that the Niagara river is the property of the Dominion. The Ongiara has been running on Sunday for years.

An excellent and righteous way to "save the Sabbath" is to get the boats on the lake so that no work need be done on Sunday. This port, and I suppose all other lake ports for that matter, have had to figure on this basis twice this week on account of the glorious and soul inspiring Fourth. This day is the holy of holies, nor is the patriotic Patrick very much averse to having the "Fourth of July, over his eye," if only for the interestin' fayture of the day, be gob; so the boats were rushed, or as many of them as could be, until they were ready to leave port and be done with. It must be quite a study to keep half a dozen charter-seeking boats winging their way so as to obviate the necessity of spending, or rather losing a Sunday in port. Chess playing, or even settling the fate of nations is not a circumstance compared to the hornswoggling calculations rendered imperative and absolutely necessary to keep boats moving during the thirty to forty Sundays and other holidays that come around during the season of navigation. It is skillfully accomplished though, some way or another.

FLOTSAM, JETSAM AND LAGAN.

Albert Voetsch, a deckhand on the tug Annie R. Heness, fell overboard, on Wednesday, while the tug was in Portage River, and was drowned.

Among the visitors to Cramps' shipyard Philadelphia last week was A. Denny, of Dumbarton, Scotland, a member of the well known shipbuilding firm of William Denny & Bros. Mr. Denny is completing a tour of the world.

George T. Smith, formerly of Jackson, Mich., has purchased the remains of the old warship Chesapeake, which was captured by the British in Boston harbor in 1812, and will use the timber in the mills he will exhibit at the Paris exposition.

Gilbert Turner was drowned in the river off Port Huron, on Wednesday morning. He was fishing from a skiff and attempted to catch a tow with the steamer Queen City. The skiff was capsized. He leaves a widow and one child. An attempt will be made to recover the remains.

Portland, Ore., claims to have the fastest stern-wheel steamboat in the world. The Hassalo, recently completed for the Columbian River trade, has made spurts of 26-23 miles an hour. She is 186 feet long, with a tubed boiler 8 feet in diameter, and compound engines of over 3,000 horse-power.

The American Ship Windlass Co., is as busy as it has been at any time in the past several decades. Among the many steam vessels they are furnishing the "Providence" windlasses and capstans are the four big Morgan Liners and the two steamers building for the Cromwell Line by the Newport News Shipbuilding and Drydock Co. This company is also building the windlass for the magnificent five thousand ton freight and passenger ship under course of construction by the Cramps for the Plant Line.

Wm. Lute, of Marine City, Mich., and Hayes Finkel, of Bay City, two sailors, who were stealing a ride on a Lake Shore train, on Monday, received serious injuries. They were on the platform of the forward coach, and just east of Huron, O., were either knocked off the train or were frightened and jumped. Lute will probably die. Finkel will live.

Lamp & Stoakes, Catawba Island fishermen, have just launched at Vermillion a small tug that they use in the fish trade between Sandusky and Erie. The tug has been christened Alberta T. She is 46 feet over all and 12 feet beam, and power will be furnished by a 25 horse-power gasoline engine, built by the Underwood Motor Company, of Sandusky.

The Columbia Iron Works and Drydock Company is preparing to launch a steamer for the Hartford and New Haven Transportation Company. She is a twin-screw, steel passenger steamer, 255 feet long, 45 feet beam and 13 feet depth of hold. She will accommodate 250 passengers and is to equal in speed any vessel on Long Island Sound. She will be equipped with electricity. The Columbia Company also has on the ways a 150 foot steel tug for the Consolidation Coal Company, the 28-knot torpedo boat Tingey, the revenue service steamer Seminole for New York harbor, and the submarine torpedo boat Plunger.

LETTERS AT DETROIT MARINE POST OFFICE, JULY 5, 1899.

To get any of these letters, addressees or their authorized agents will apply at the general delivery window or write to the postmaster at Detroit, calling for "advertised" matter, giving the date of this list and paying one cent.

Advertised matter is previously held one week awaiting delivery. It is held two weeks before it goes to the Dead Letter Office at Washington, D. C.

Austin, J. E., Str. Alcona. McKenzie, Geo, Str. America.
Brown, John, Sch. Fulton. McDonald, Peter.
Beck, Robt. McKenzie, John, Str. Sparta,
Bladdie, Fred., Str. Pabst. Olander, Vic., Str. Glasgow (2)
Breen, Jas., Str. Superior. Philips, Oliver.
City. Reid, M. J., Str. Rose (2).
Cartwright, C., Str. Fletcher. Stewart, Hattie, Str. North Land.
Corner, John. Siegmund, Jno., Str. Superior
Donaldson, E. H. City.
Ellery, Geo. Schwartz, Harry.
Emmons, Chas., Str. Sitka. Schronrock, C. H.
Heldt, Aug. Surles, Jas., Str. Fulton.
Irvine, L. H. Stokle, Harold.
Klink, John, Str. Glasgow. Thompson, Chas., Sch. Athens.
Mitchell, Jno. Tinney, Marion.
McKenna, Felix, Str. Zunker, Herman.
Raleigh.

HALF-YEARLY SHIPBUILDING REPORT.

The Bureau of Navigation, Treasury Department, Washington, D. C., assigned official numbers to the following tonnage built at lake ports during the six months ended June 30th, 1899:

STEAM.

NAME.	TONNAGE.		WHERE BUILT.	HOME PORT.
	GROSS.	NET.		
W. H. Meyer	94	64	Benton Harbor, Mich.	Milwaukee, Wis.
Stella	9	6	Ashland, Wis.	Marquette, Mich.
Dan. W. Miller	10	8	Toledo, O.	Toledo, O.
Allendale	50	32	Grand Rapids, Mich.	Grand Haven, Mich.
M. A. Hanna	4,661	3,116	Cleveland, O.	Cleveland, O.
Pennsylvania	4,840	3,604	Lorain, O.	Cleveland, O.
*Eliza H. Strong	781	614	Tonawanda, N. Y.	Buffalo, N. Y.
Maud B.	98	67	Marine City, Mich.	Pt. Huron, Mich.
Henry W. Oliver	4,909	3,617	Lorain, O.	Cleveland, O.
Pennsylvania	747	420	Wyandotte, Mich.	Erie, Pa.
Topinibe	16	13	Charlevoix, Mich.	Grand Haven, Mich.
Eureka	2,122	1,399	Lorain, O.	Cleveland, O.
Illinois	2,427	1,468	Chicago, Ill.	Chicago, Ill.
Niagara	36	24	Grindstone, Ind.	Cape Vincent, N. Y.

* Rebuilt, formerly the N. K. Fairbank.

SAIL AND TOW.

S. O. Co. No. 86	1,102	954	West Superior, Wis.	Chicago, Ill.
Lakeside	39	32	Mt. Clemens, Mich.	Detroit, Mich.
Skip	10	10	Alexandria Bay, N. Y.	Cape Vincent, N. Y.
Nymph	6	6	Chicago, Ill.	Chicago, Ill.
Bonnie Boy	21	19	Charlevoix, Mich.	Grand Haven, Mich.
Dord	10	10	Alexandria Bay, N. Y.	Cape Vincent, N. Y.
Teddy R.	10	10	Alexandria Bay, N. Y.	Cape Vincent, N. Y.
Santiago	2,600	2,525	West Bay City, Mich.	Port Huron, Mich.
Viola	12	10	Au Sable, Mich.	Port Huron, Mich.

UNRIGGED VESSELS.

Osborn	115	115	Duluth, Minn.	Duluth, Minn.
No. 19	169	169	W. Superior, Wis.	Duluth, Minn.
No. 20	167	167	W. Superior, Wis.	Duluth, Minn.
Geo. H. Striker	31	31	Buffalo, N. Y.	Buffalo, N. Y.
H. B. & B. No. 13	354	354	Buffalo, N. Y.	Buffalo, N. Y.

The foregoing table shows a total of 29 craft, having an aggregate gross tonnage of 25,446, or 18,314 net tons, divided as follows: 14 steamers of 20,800 gross and 13,902 net tons, showing a mean for each craft of 1,486 gross tons. Nine vessels classed under sail and tow, having a mean of 423 tons, or a total of 3,810 gross and 3,576 net tons. Six vessels, classed as unrigged, showing a mean tonnage of 139 and a gross of 836 tons. The foregoing are all the vessels officially known to the government as being built at lake ports during the first half of the present year, we may add, however, that the latter half-yearly report will show a vast increase over the figures herewith submitted.

A WRONG IMPRESSION.

The following quotation is what we hear and read through the Commissioner of Navigation sending out to newspapers an advanced report of the national shipbuilding during the past year.

"The United States Bureau of Navigation considers the John Smeaton, now nearing completion at the Superior shipyard, the most notable vessel of the year, and probably the largest "fore and aft" vessel ever built. The Smeaton's gross tonnage is 5,049, while the largest sea-going vessel built in Europe last year was 3,214 tons. The general public does not fully apprehend the magnitude of lake shipping or realize the fact that the largest and best freight carriers afloat are on the great inland seas."—Evening Telegram, Superior, Wis.

It is a very unfair comparison and highly misleading to class over-sea sailing vessels in the same category as lake-built tow barges. The Smeaton may be a "fore and aft" vessel, as we presume she has two ends, but, if the Bureau of Navigation wanted to convey the intelligence that she is a fore and aft rigged sailing schooner, it is densely ignorant regarding the nomenclature of the rig of vessels.

A RECLUSE.

He lost a million at Monte Carlo and now he lives with the bears. A very swell Englishman's engraved card bears the following legend: "Mr. H. W. Evenden, Compement d'Ours Island, Lake Huron." The island is commonly known as "Commodore," but it is really as above, which translated means "bear's camping place." It is situated in Bear Lake, an arm of Georgian Bay, and quite near American waters. There Mr. Evenden has erected a pretentious castle on a promontory overlooking a grand expanse of sea and mountain and lives the secluded life of an English gentleman. A story among the natives, few and far between, is to the effect that Mr. Evenden inherited a title and a million dollars. In one round at Monaco he lost all but \$150,000, and then fled to the wilds of the new world, where he is the wonder of the pioneers and where he says he is close to the only real honest thing in the world—nature.—News, Sault Ste. Marie.

THE granting of subsidies to Japanese shipowners means something like the immediate placing of eighteen ships on the stocks. These vessels will be of at least 6,000 tons, steaming between 15 and 17 knots. They are to run to European ports, to San Francisco and Seattle, and will no doubt give substantial effect to the object of the subsidies, namely, the encouragement of Japanese trade.

WRECK AND CASUALTY REPORT.

The marine agent of the Weather Bureau stationed at Detroit has compiled the following list of casualties from the opening of navigation, April 26 to June 18, inclusive dates.

May 10: Schooner Three Brothers went ashore in the Straits east of Mackinaw during heavy weather; released without damage.

Steamer Thomas Davidson went ashore at Cana Island, Lake Michigan, during dense fog; released on the 12th, grounded again and released.

May 13: Schooner Nelson, in tow of steamer A. Folsom, foundered in Lake Superior off Grand Marais, Mich., during heavy northwest gale with freezing weather, and carried down eight of the crew, the captain alone being saved. Estimated value of vessel, \$10,000; cargo, \$4,400.

Steamer F. Schlesinger went ashore at Cana Island during heavy northwest gale; released with nominal damages.

May 18: The tug Erie stranded about 3 miles west of Dunkirk during dense fog; was abandoned to the underwriters; estimated loss, \$3,000.

Schooner W. Y. Emery stranded on the Main Ducks during a gale; released; damage to vessel, \$4,500.

Schooner Ganges collided with steamer Presque Ile on Lake Erie between Colchester and Dummy Light; no damages on Presque Ile; loss on Ganges, vessel, \$4,000; cargo of coal, \$2,000.

May 27: Steamer Wissahickon stranded at Whitefish Point, near Milwaukee, during dense fog; released: damage to vessel \$4,500.

Schooner J. V. Taylor collided with steamer A. G. Lindsay on Lake Michigan off Port Washington during a dense fog; damages to the Lindsay, \$3,000; Taylor, \$1,000.

May 28: Steamer Minnie Kelton stranded near Pointe aux Barques during dense fog; released; cargo of corn not damaged; damage to vessel \$2,500.

Schooner Lotus collided with unknown vessel on Lake Michigan during dense fog.

May 30: Tug Fern stranded on Thunder Bay Island during dense fog.

Steamer Wawatan collided with steamer Griffin off Point Iroquois during dense fog, cracking a plate on the Griffin; no damage to cargoes, no damage to the Wawatan; damages to Griffin, \$2,500.

May 31: Schooner Delos Wolf, coal laden, was caught in a heavy northwest squall off Pelee Island, stripped of her canvas and drifted over to Cedar Point, where she was sighted the next morning by a tug and towed into Sandusky harbor; no lives lost; estimated loss, \$1,500.

June 5: Schooner O.M. Nelson was driven ashore at south end of Pilot Island during heavy southwest gale and abandoned; crew succeeded in reaching shore in safety; estimated value of vessel, \$1,500; cargo of lumber, \$2,500.

June 6: Tug Niagara stranded on Graham's Point during dense fog; released.

Steamer Waverly stranded on South Manitou Island during dense fog; jettisoned 200 tons of iron ore; damages to vessel, \$5,000; cargo, \$500.

June 18: Steamer Tourist, with a party of excursionists aboard, broke her rudder and was forced ashore in a heavy squall at St. Joseph, Mich.; damages nominal.

June 3: Small passenger steamer R. G. Stewart went ashore at Michigan Island, Apostle Group, Lake Superior, during dense fog; afterwards took fire and became a total loss. One life lost. Estimated value of vessel, \$7,500.

EASTERN FREIGHT REPORT.

Messrs. Funch, Edye & Co., New York, state in their weekly freight report to the RECORD, as follows:

The continued active demand for tonnage for general cargo from the Gulf has caused a slight improvement in the charters of our general freight market, in which grain freights have participated to a moderate extent. The rate for Cork f. o. from range of loading ports has advanced to 3s., as against owners' demands for 3s. 1½d., whilst larger boats may be placed for mixed cargoes of heavy grain and oats at 2s. 6d. and 1s. 10½d. The number of open vessels having considerably diminished, the enquiry of deal tonnage could not readily be met, and 1s. 3d. @ 2s. 6d. over last figures could now probably be secured. The demand for timber boats from the Gulf equally shows some improvement, and rates are firm, the declining tendency having disappeared. A couple of charters for case oil by steam for Japan, the first after quite a long interval, establish a fair rate for this business.

Our market for sail tonnage remains quiet but very firm,

owing to continued scarcity of tonnage, on spot as well as prospective. Rates, however, have not experienced any decided advance. The charter of a couple of steamers for case oil from Philadelphia to Japan, is of some interest, as indicating the need of prompt tonnage in that direction, and we hope that this will have a good effect upon the rates obtainable for later shipments by sail, although, at the moment, shippers show no disposition to meet owners' advanced ideas.

THE HEAVENS IN JULY.

Astronomical data for July, 1899, furnished by the Washburn observatory:

Mercury is an evening star, but not a conspicuous one at this season of long days and twilight. However, it may be seen near the horizon somewhat north of west for some days preceding and following its date of greatest eastern elongation, July 21, if you look within an hour after sunset. Venus is the bright morning star preceding the rising of the sun at nearly the same point of the horizon. In the evening sky there are three conspicuous planets; the ruddy Mars, below the western sky, Jupiter in the south-west, and Saturn farthest south, reaching the meridian in the middle evening.

The times of sunrise and sunset at Milwaukee for the month are as follows:

	SUNRISE.	SUNSET.
July 1.....	4:16	7:34
" 11.....	4:22	7:31
" 21.....	4:31	7:24
" 31.....	4:41	7:14

The times of the moon's phases are:

New Moon.....	July 7, 2:31 p. m.
First Quarter.....	" 15, 5:59 p. m.
Full Moon.....	" 22, 3:41 p. m.
Third Quarter.....	" 29, 6:42 a. m.

The principal fixed stars during the month are: To the west Arcturus and Spica; near the meridian, Antares. To the east, Vega and Altair.

SUN'S AMPLITUDES.

The following approximate amplitudes of the Sun's rising will be given each week in this column during the season of navigation. A second bearing may be taken by compass at sunset, by reversing the east bearing, given for the nearest latitude, as the change in declination for a few hours makes but a slight difference in the true bearing of the Sun's setting. The bearing may be taken when the Sun's center is on the horizon, rising or setting. The three elements which may be obtained by taking these amplitudes are the quantities known as local attraction, variation and deviation.

LAKE ERIE AND S. END LAKE MICHIGAN, LAT. 42° N.

Sunrise.	Amplitudes.	Bearing P'ts.	Bearing Comp.
July 8.....	E. 31° N. = N. 5¼ E. = N. E. by E. ¼ E.		
July 12.....	E. 30° N. = N. 5¾ E. = N. E. by E. ¾ E.		
July 15.....	E. 29° N. = N. 5¾ E. = N. E. by E. ¾ E.		

LAKE ONTARIO, S. END HURON AND CENTRAL PORTION LAKE MICHIGAN, LAT. 44° N.

Sunrise.	Amplitudes.	Bearing P'ts.	Bearing Comp.
July 8.....	E. 32° N. = N. 5½ E. = N. E. by E. ½ E.		
July 12.....	E. 31° N. = N. 5¼ E. = N. E. by E. ¼ E.		
July 15.....	E. 30° N. = N. 5¾ E. = N. E. by E. ¾ E.		

N. END LAKES HURON AND MICHIGAN, LAT. 46° N.

Sunrise.	Amplitudes.	Bearing P'ts.	Bearing Comp.
July 8.....	E. 33° N. = N. 5 E. = N. E. by E.		
July 12.....	E. 32° N. = N. 5½ E. = N. E. by E. ½ E.		
July 15.....	E. 31° N. = N. 5¼ E. = N. E. by E. ¼ E.		

LAKE SUPERIOR, LAT. 48° N.

Sunrise.	Amplitudes.	Bearing P'ts.	Bearing Comp.
July 8.....	E. 34° N. = N. 5 E. = N. E. by E.		
July 12.....	E. 34° N. = N. 5 E. = N. E. by E.		
July 15.....	E. 33° N. = N. 5 E. = N. E. by E.		

With a compass correct magnetic, the difference between the observed and true bearing or amplitude will be the variation for the locality. Should there be any deviation on the course the vessel is heading at the time of taking the bearing, the difference between the observed and the true amplitude after the variation is applied will be the amount of deviation on that course. If the correct magnetic bearing is to the right of the compass bearing, the deviation is easterly, if to the left, the deviation is westerly.

VESSELS PASSING DETROIT.

Postmaster F. B. Dickerson, of Detroit, kindly furnishes the following information:

Total number of vessels passing Detroit during the season of 1898, 22,004, of which number 11,441 were by day and 10,563 by night. Total number of vessels passing Detroit from the opening of navigation this season until 5 p. m., June 15, 4,604.

SHIPPING AND MARINE JUDICIAL DECISIONS

(Collaborated specially for THE MARINE RECORD.)

Shipping—Bill of Lading—Construction.—Exceptions in a bill of lading introduced by the shipowners themselves in their own favor are to be construed most strongly against them. Pacific Coast S. S. Co. vs. Bancroft-Whitney Co. et al., 94 Fed. Rep. (U. S.) 180.

Reasonableness of Limitation.—A provision in a bill of lading requiring all claims for damages to be presented within 30 days from the date thereof makes the period of limitation short, and is therefore void. Pacific Coast S. S. Co. vs. Bancroft-Whitney Co. et al., 94 Fed. Rep. (U. S.) 180.

Admiralty Jurisdiction—Maritime Contracts—Contracts to Procure Insurance.—A contract by a carrier by water to procure insurance on goods received for transportation is not a maritime contract, creating a maritime lien, and a court of admiralty has no jurisdiction of a suit for its breach. The City of Clarksville, 94 Fed. Rep. (U. S.) 201.

Presumptions.—Although it may be presumed that a vessel is seaworthy when she sails, if soon thereafter a leak is found, without the ship having encountered a peril sufficient to account for it, the presumption is that she was not seaworthy when she sailed. Pacific Coast S. S. Co. vs. Bancroft-Whitney Co. et al., 94 Fed. Rep. (U. S.) 180.

Salvage—Allowance to Crews.—Where salvage services which occupied less than a day are of the lowest order, and the crews of the tug perform only services in the ordinary course of employment, the award to them should not be more than two months' pay. Ulster S. S. Co. vs. Cape Fear Towing and Transportation Co. et al., 94 Fed. Rep. (U. S.) 214.

Salvage—Services.—Services of tugs in towing a steamer from an off-shore sand bar, on which she had grounded, in connection with their carrying out the steamer's anchors to enable her to assist in getting off the bar, are in the nature of salvage services, authorizing compensation on that basis. Ulster S. S. Co. vs. Cape Fear Towing & Transportation Co. et al., 94 Fed. Rep. (U. S.) 214.

Liability of Injury.—Common carriers by water are in the nature of insurers, and are liable for every loss or damage, however occasioned, unless it happens from the act of God or the public enemy, or by the act of the shipper, or from some other cause or accident expressly excepted in the bill of lading. Pacific Coast S. S. Co. vs. Bancroft-Whitney Co. et al., 94 Fed. Rep. (U. S.) 180.

Laches.—Mere delay for the full period of four years allowed by the statutes of limitation, in bringing a suit in rem to recover damages to cargo, is not, of itself, and in the absence of exceptional circumstances from which laches would be imputable, sufficient to justify the court in declining to entertain the suit. Pacific Coast S. S. Co. vs. Bancroft-Whitney Co. et al., 94 Fed. Rep. (U. S.) 180.

Shipping—Contribution in General Average—Liability of Carriers.—The fact that the owners of a vessel cannot maintain an action against the owners of the cargo for contribution in general average for the ship's loss by fire because the fire was caused by the negligence of one of their crew, which is imputable to them, does not protect them from a similar action by the owners of the cargo for contribution. The Strathdon, 94 Fed. Rep. (U. S.) 206.

Proximate Cause.—The proximate cause of one of the coaling gang on a vessel falling down a hatch between decks, open and unlighted, as usual, towards which he started to make his exit by the ladder leading from it to the upper deck, is his failure to make use of one of the lanterns furnished the men to guide themselves as well as their wheelbarrows; he knowing of the hatch and the custom relative thereto. The Saratoga, 4, Fed. Rep. (U. S.) 221.

Stipulations for Presenting Claims.—A provision in the shipping receipts that all claims against the steamship company or any of its stockholders for damage to the goods must be presented within 30 days from the date thereof, as a condition precedent to suing the company or its stockholders, does not cover the right to maintain a suit in rem against the ship, in which the company appears as claimant. Pacific Coast S. S. Co. vs. Bancroft-Whitney Co. et al., 94 Fed. Rep. (U. S.) 180.

Parties in Admiralty—Joiner of Libelants in Action for Collision.—Under the rule in admiralty that all parties may join as libelants where their rights of recovery rest on a common cause of action, whether the suit is in personam or in rem, though, as between themselves, their interest may be separate, persons suffering separate injuries from a collision may join in a libel to recover damages therefrom the owner of the vessel in fault. Jacobsen et al. vs. Dalles, P. & A. Nav. Co., 93 Fed. Rep. (U. S.) 975.

Shipping—Perils of the Sea—Exceptions in Bill of Lading—Burden of Proof.—A steamer, alleged by her claimants to have been staunch, strong, and seaworthy, and fully manned, officered, and equipped, was discovered, after being only 11 hours at sea in fair weather, to have a list, due to sea water in her between-decks. The water increased so rapidly that a few hours later it was decided to run for a harbor of refuge, where the ship was at once beached to prevent foundering. Held, in an action for damage to the cargo, that the burden was on the carrier to show wherein and how the leak arose, so as to bring the loss within the exception in the bill of lading as to perils of the sea. Pacific Coast S. S. Co. vs. Bancroft-Whitney Co. et al., 94 Fed. Rep. (U. S.) 180.

SPECIAL MACHINERY FOR MODERN-BUILT, LAKE CARGO STEAMERS.

The Chase Machine Co., Cleveland, are the manufacturers of several specially improved appliances and mechanism used on the large, modern-built cargo steamers recently put afloat on the lakes.

The accompanying illustrations will serve to show at least three of the latest mechanical devices put on the market, devised and designed especially with a view to facilitate the handling of vessels which may have to come-to with stern moorings, and also in their docking and hauling while in port.

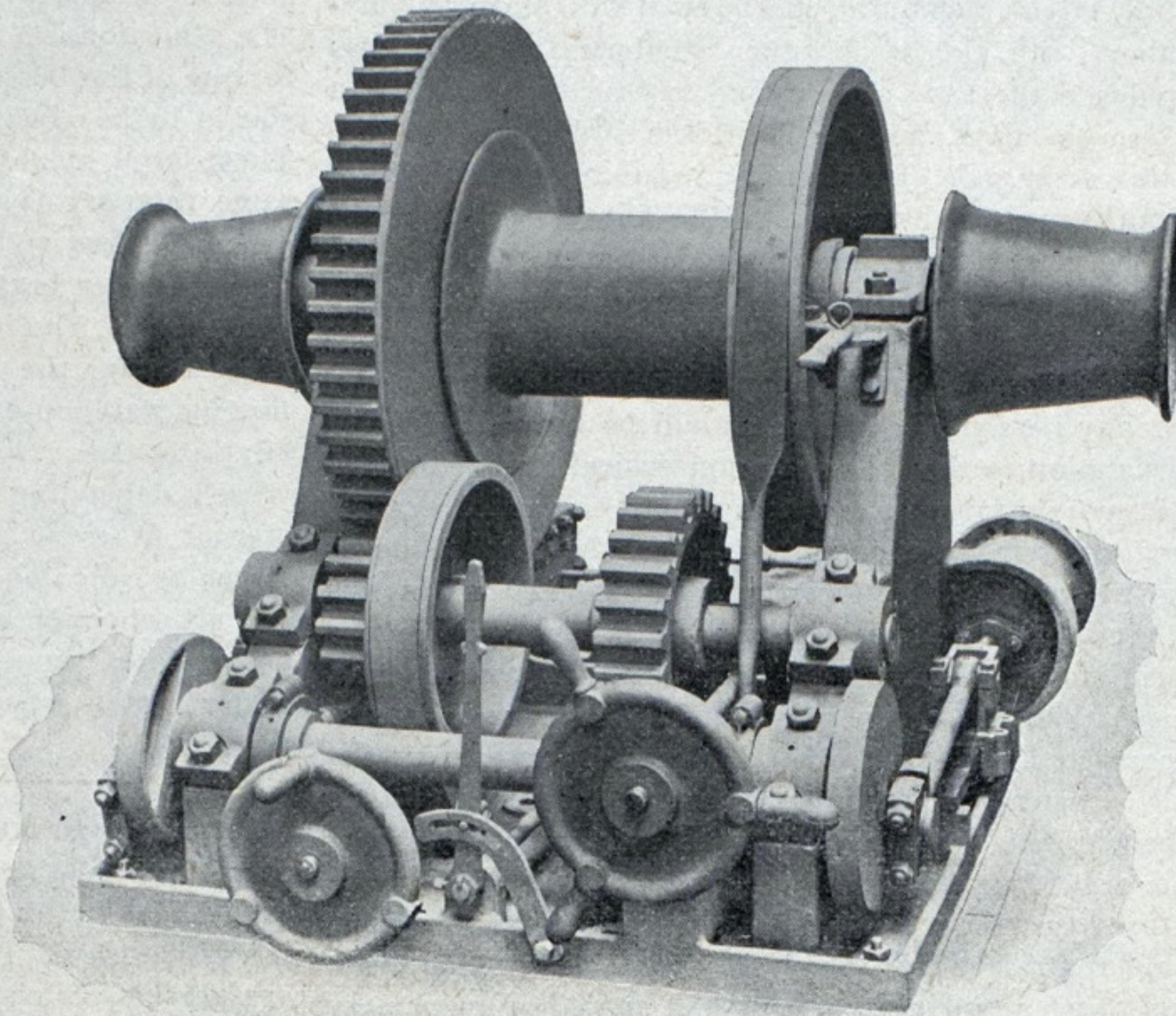
Relative to the mooring by the stern feature. It may not be generally known, or perhaps as widely appreciated as it should be, that it has been found necessary while piloting the rivers connecting the chain of lakes, to frequently come to an anchor while descending the rivers, or sailing with the current. In this case, vessels of 350 to 450 feet in length have not room to swing to their bower anchors, and a sheet or stern anchor is now always carried at the stern for the purpose of letting go when the vessel is moving in the same direction as the current, or under other conditions in narrow waters.

The advantage of this style of mooring will be easily recognized by those having the slightest knowledge of handling vessels.

As in the case of a departure in anchoring by the stern, so also is there a change in the method of docking and hauling

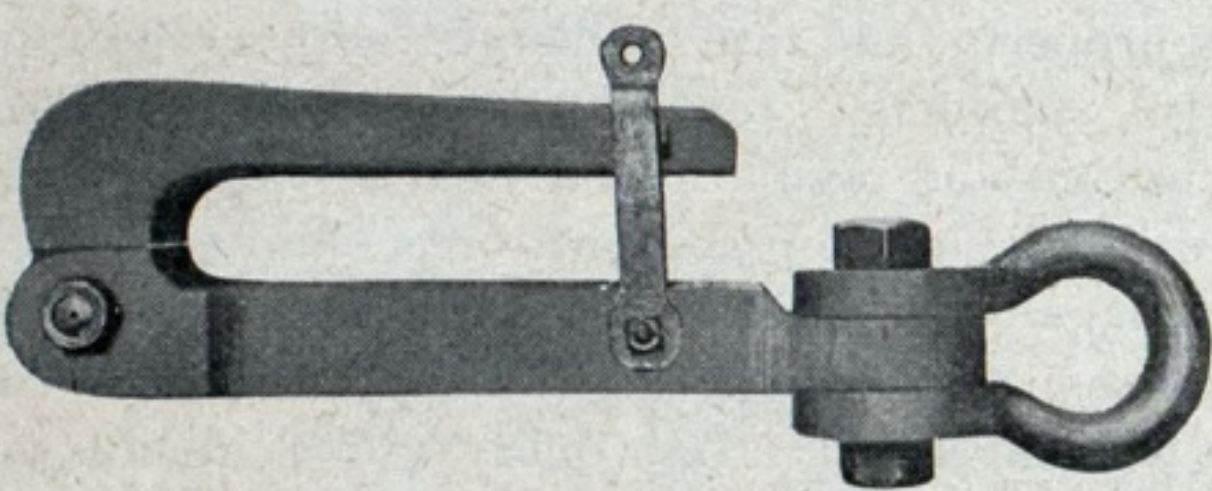
been evolved after many trials and failures of other forms, with the result, that the Chase Machine Co. now make a specialty of this type of towing hook.

Cut No. 1 illustrates the auxiliary windlass for stern mooring purposes; it has double cylinders, 7 inches in diameter by 8 inch stroke, and reverses, with patented valve motion. The drum, or center barrel, is fitted with extra strong lock-



NO. 1. AUXILIARY WINDLASS FOR WORKING STERN ANCHORS.

ing gear, besides carrying a brake. This type is also furnished with two barrels, and, if preferred, with a wildcat for handling chain; also with auxiliary hand power, thus making a powerful, double geared deck engine. Used in the fleet of the Minnesota Steamship Co. to handle the stern



NO. 3. IMPROVED, STEEL, TESTED TOWING HOOK—CLOSED.

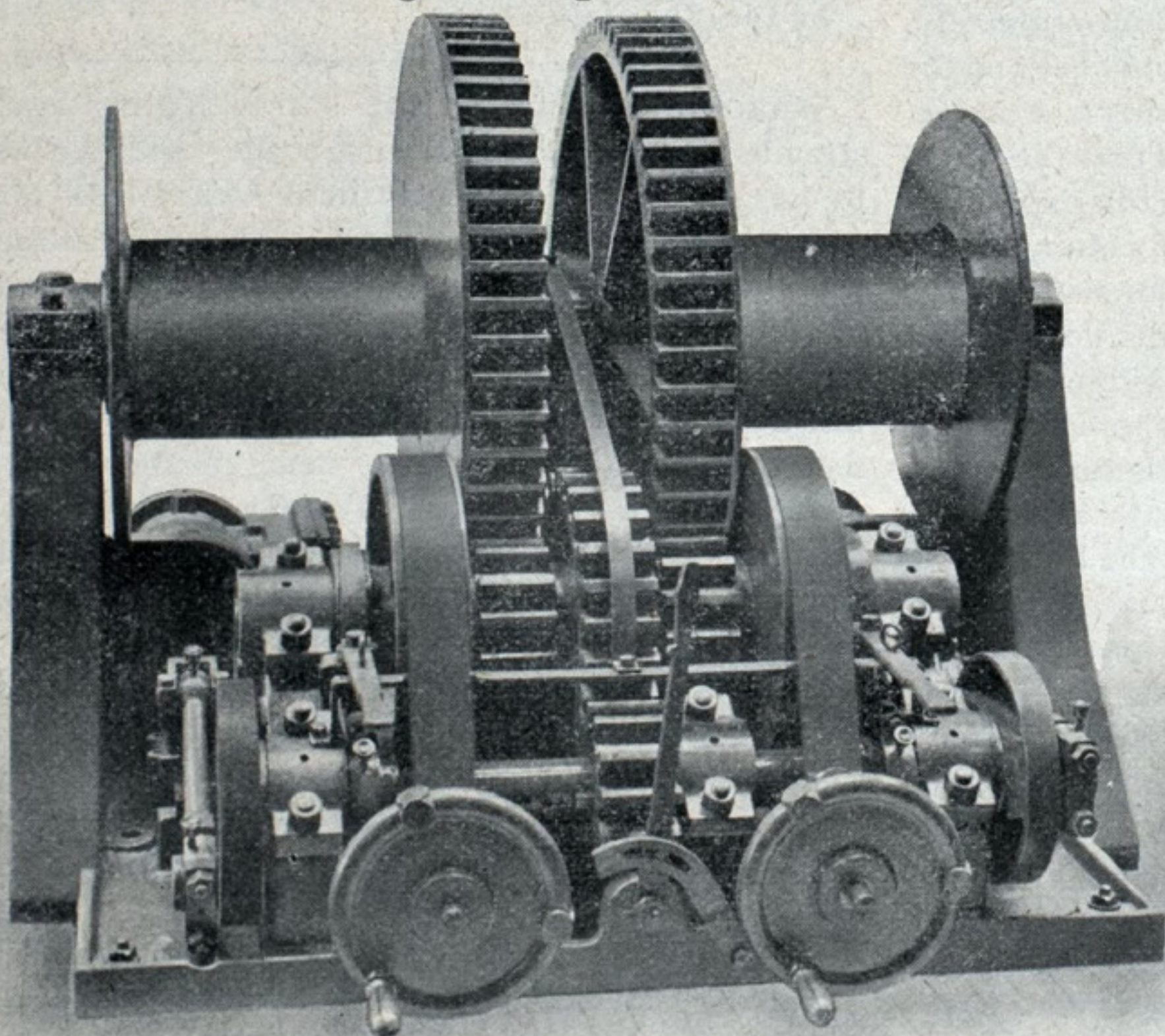
these large, steel hulls when loading or discharging. A machine is now placed one forward and one aft so that with proper leads only one hand is required to attend to the lines at each end of the vessel while hauling and shifting alongside of a dock, as each deck engine, being double barreled



NO. 4. THE IMPROVED TOWING HOOK—OPEN.

anchor, the machine is fitted with a drum to accommodate a 2-inch, flexible steel wire rope, thus obviating the necessity of having a bulky windlass, or capstan, with wildcat, cables, chain-lockers, etc., and in being used this way the machine is not only found ample for the work on every occasion, but it gives excellent satisfaction under all conditions.

Cut No. 2 shows the independent-driven deck winch having double cylinders, 7 inches in diameter by 8 inch stroke, with patent valve motion and each drum independently driven, provided with locking mechanism and powerful friction brakes. The drums are 12 inches in diameter and 18 inches long. This machine is used, as we have stated, for docking and hauling purposes, and, as a proof of their utility as well as their capability of doing the work required of them, it may be pointed out that over thirty of these machines have been placed on board vessels this spring, or, practically, within the last sixty days. As in the case of mooring by the stern, these machines handle flexible steel wire rope, and in this particular is a source of economy



NO. 2. REVERSIBLE, INDEPENDENT-DRIVEN DECK WINCH, FOR DOCK, HAULING AND OTHER DECK PURPOSES.

and reversible, permits of four lines being worked at the same time, and, in actual practice, one hand is all that is called for, or found necessary at the deck winch when moving ship.

The improved towing hook, also shown herewith, has

by saving the former large outlay covering the cost of manilla lines, and it may be mentioned in this connection that it takes something more than ratline stuff to make fast, hold, move and haul these large 5,000 to 7,000 ton steel vessels, even when at well protected docks, piers and wharves.

Cuts Nos. 3 and 4 gives a perfect view of the improved towing hook as manufactured solely by the Chase Machine Co. It is forged from the best obtainable stock after being duly tested. The hook is then carefully fitted and put together, and while a large number are now in use, working 1 3/4 inch and 2 inch patent, flexible, high grade steel wire rope, there has never been a single flaw found in any of these special products of mechanical skill. It may be said, however, that experience and rare good judgment has been the means used in finding out the vulnerable parts of other towing hooks and in giving these the maximum strength where it is usually required.

The Chase Machine Co. is a well-established firm and has been in business in Cleveland for many years. In line with other prominent firms and progressive industries, they have recently secured adjoining property and extended their works so as to give ample room for carrying on their increasing production of high classed mechanical specialties for marine and other uses.

SOME ASTRONOMICAL NOTES FOR JULY.

These delightful summer evenings furnish most favorable opportunities for becoming acquainted with the stars and for enjoying their companionship.

Arcturus in Bootes, now just past the meridian, in the early evening, may still be considered the leading brilliant among the first magnitude stars now visible. He is at his best, and will continue to occupy a prominent position among the starry hosts during the month. The last two stars in the end of the handle of the Great Dipper will always furnish a line of direction that will enable one to identify this object of interest and beauty.

Toward the west, Regulus in Leo, is already struggling with the increasing twilight, and hence, can no longer be a conspicuous object in our evening sky. Spica in Virgo just west of the meridian, will be at its best during the month, and by reason of the gradual withdrawal of Jupiter, will be seen to better advantage than for some months previous. Vega in Lyra, now toward the north-east, will be nearly overhead during most of the month, and may be easily recognized by its forming a small triangle with two fourth magnitude stars, the northernmost of which is Epsilon Lyrae, the celebrated double double, or quadruple star. South-east from Vega is Altair in Aquila, a first magnitude star between two of the third magnitude. Toward the south, near the meridian, is Scorpio with its brilliant Antares, one of the summer constellations.

Mercury will reach his greatest apparent distance east from the sun, June 22, and may be seen for a few evenings, including that date. Venus is still the beautiful morning star, tho' constantly decreasing in brightness by reason of her increasing distance from the earth. Mars may be found in Leo, but by reason of the increasing distance that separates him from us, and the advancing twilight, he will only be recognized during the month by his most familiar friends. Jupiter is still in Virgo, slowly moving toward the south-east. He is a magnificent object when viewed through the telescope or even by unaided vision. Saturn may be found toward the south-east, between Scorpio and Sagittarius, the brightest star in that part of the heavens. He is now favorably situated for telescopic observation at seasonable hours in the evening, and easily surpasses in beauty all other objects within the range of small telescopes.

The earth will reach her greatest distance from the sun, the aphelion point, July 3, and will then be in round numbers, ninety-four millions of miles distant from our central luminary, or more exactly 93,953,707.5 miles. The sun is daily lessening his mid-day altitude and has reached his latest time of setting, and he does not usher in the dawn as early by several minutes as he did in the brilliant days of June.

At the close of the month we shall have lost more than forty minutes of daylight.

A spot whose greatest dimension, including penumbra, is not less than twenty-five thousand miles, is now making the transit of the sun.

Toledo, Ohio.

D. SATTERTHWAITE.

THE six boats built as defenders of the Canada's Cup will meet in trial races at Toronto the first week in August. The Royal Canadian Yacht Club hangs up a purse of \$1000, secured by suscription, and the lowest prize will be \$100. There will be six divisions—\$300, \$225, \$175, and three of \$100—so every boat will get her reward. Two of the Hamilton boats are in the water, and two in Toronto, the third Hamilton craft will be launched this week, and the McLeod design will be finished shortly. The Vivia and Canada sailed for the Queen's Cup on Saturday in Hamilton.



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CLEVELAND, O., JULY 6, 1899.

THE Light-House Board has discontinued the terms of "black" gas, "red" gas, etc.; when issuing "notices to mariners" stating the color of paint on gas buoys. In our issue of July 22nd, we were made to say considerable about red iron, and in the current issue we have to follow copy in printing something about black iron. Iron is king and can stand any old thing being said about it, but paint, and just for the sake of paint, the Light-House Department couldn't exist without paint—and whitewash, so let's give the color of paint a name, in the future.

RATHER singular that we didn't hear anything more about the government discarding fractional parts of a vessel's tonnage. Wonder if the Treasury Department indulges in this elusive way of figuring in any other of its departments outside of the Bureau of Navigation? It would be handy, nay, even generous towards owners, for the department to lop off fractional parts of a dollar on all bills which have to be paid by vessels. After all, what is \$96-100 of our decimal coinage amount to anyway? Let's be large about these little things and throw off all fractions so as to make payments on the even dollar, even if it does amount to a lot of whole dollars in the month.

FOR the past half century every effort has been made towards reducing the time consumed in crossing the North Atlantic, until there is now talk of having high speed exclusively passenger steamers. There is frequently more money for the shipowner in carrying one passenger than there is in handling and transporting a dozen tons of cargo. It therefore stands to reason that the smartest ship will carry the best class of passengers, ergo—reap the greatest dollar harvest. On the lakes, J. J. Hill, of the Northern Line, was slightly ahead of the times in placing twin-screw miniature Atlantic liners in the exclusively passenger service between Buffalo and Duluth, but we will hear a great deal more of expressly built passenger steamers in the near future than we have in the past.

OUR cousins across the border are consistent in their observance of the Lord's day. Until quite recently no street cars were permitted to run in Toronto on Sunday and now the master of a passenger steamer is cited to appear before "a limb of the law" at Niagara, for seeking patronage, or rather worse than that, actually ferrying pleasure seekers around on the Sabbath day. A query has often presented itself to us something after this style. If it is unlawful, from an ecclesiastical standpoint, for a vessel to leave port on a Sunday, why are so many permitted to make port, or arrive at their destination on Sundays, and this too after a passage of, say several months, during which time there would have been lots of opportunities to gain a few hours or to be retarded for that length of time?

THE ATLANTIC FERRY.

A mean average passage of about forty days was the schedule time of crossing the North Atlantic several decades ago, and, when in 1850, the Collins Line of steamers gained the traveling record by spinning (?) across in 9½ days, it was no doubt thought to be the eighth wonder of the world.

Science, talent, ingenuity, mechanical skill and hard physical labor, with almost all other attributes to assist, has since reduced the time of ferrying across "the pond" to a little over 5½ days, and the world is still trying to discount this dizzy gait of making and gaining not daily, not even hourly records, but down to the minutes now, let the weather be what it may, and, the record maker, is the dollar getter, hence the millions of money spent in making record passages.

With these everyday modern experiences, it is rather singular that any person's judgment should be so warped as to give circulation to the following nonsensical statement, and it is still more strange that others should repeat it, because, in doing so, retrogression is argued in the face of never ceasing progress. The quotation we allude to runs in this way: "It is said that the tendency in marine architecture at present is toward vessels of greater carrying capacity and less speed than the ocean greyhounds that have in recent years competed with each other for record runs across the Atlantic. Instead of the time of passage being reduced, as some people have been expecting, it is likely to be lengthened, if it be true that slow vessels pay better than those which make the run across the Atlantic in less than six days. It is said that eight-day vessels pay best, consuming much less coal and requiring so much less space for machinery and coal bunkers that their cargo-carrying capacity is greatly increased. The new vessels will probably be bigger than the old and more luxuriously furnished, and they will make up for lack of speed in greater comfort for the passengers."

The above non-committal fashion of writing, as, "it is said," "if it be true," "some people expecting," etc., has no relation to the trans-Atlantic mail and passenger service whatever. A Western Ocean timber droger, or a cargo steamer, may loll along in crossing "the pond" anywhere from ten to fifty days, and, bound west, may come along in the region of the northeast trade winds so as to secure fine, steady weather, but the Atlantic mail and passenger service is now looking towards a neat five-day passage, and it will probably soon be an accomplished fact.

WHAT is it that the propounders of the gospel won't touch upon? What is it that they don't know all about, except Christianity? This week we have a Cleveland sky pilot denouncing a vessel owner from his pulpit on account of the loss of a vessel. Avarice, parsimony, ingratitude and a love of the filthy lucre, are only a few of the charges which this blatherskite trumps up against a well-known and highly reputable vessel owner. We are impassionately, also logically, informed, that if the vessel had not been on the lake she would not have had a chance to founder! Furthermore, it was through the greed of the owners that the vessel was on the lake last Friday morning. Would this expounder of divine truths have had her wrapped up in cotton batten, chocked off under her bilges with feather pillows and placed under a glass case, or might he agree to let her do what she was built for? We would like to have this biblical student for a few hours in a leaky ship on a lee shore, he would either have to part with his pelf, recant his heresies, or try to imitate the established precedent and walk ashore, but we rather guess that he would be stripped to the buff taking exercise at the "Quebec monkey jacket" and giving his undivided attention, also, every ounce of his alacrity, to the lively coaxing of "the one-armed lady," until she sucked, the one-armed wee-gee we mean, and not the lady; that's all he would be fitted for. Safely ensconced in his luxuriously furnished study, we would ask this ignoramus to ring up the shades of St. Paul, and, after establishing a composed connection, call him down for being cast away on the Island of Malta. At the same time he might learn something about that squall on the sea of Galilee. Those who live by the sword must perish by the sword. The same rule holds good, we presume, when water is the food-giving element, also, when jaw tackle is the profession, unless and excepted it comes from the mouths of babes and sucklings.

THE Bureau of Navigation, Treasury Department, Washington, D. C., gives out the following: "In certain trades our large sailing vessels endeavor to compete with foreign

cargo steamers, and doubtless will continue to do so. The most notable vessel is the John Smeaton, a steel schooner of 5,049 gross tons, built at West Superior, Mich., probably the largest fore and aft steamer ever built. The largest sea-going sailing vessel built in Europe in 1898 was the Ernest Siegfried, of Havre, 3,214 tons." Let it be heralded that the John Smeaton is not a sailing vessel, nor is she so regarded by another branch of the Treasury Department. The Smeaton is a large, steel tow-barge, built as a consort for one of the Bessemer, (Rockefeller) line of steamers, and she is to be always under convoy, if we may so express it. These large, steel tow-barges should not be classed in the same category as sailing vessels; they are not intended to sail, have less right to the name of fore and aft schooner than the river barges on the Thames, as they do go it alone sometimes. The immense steel tow-barges put afloat on the lakes during the past few years are more after the style of floating warehouses, used for holding cargoes in transit, than anything else. Nor should they be confounded with sailing vessels depending alone on wind propulsion. There is an eternal fitness in the nomenclature of floating bodies and it is just as ridiculous to name a canal boat or tow-barge a fore and aft schooner as it would be to call an express wagon an automobile, though both might be right in a degree, or under certain special and unusual conditions. A word to the wise!

THE Chicago grain shippers who caused the re-rating and corrected classification of about forty wooden vessels recently, had better do it some more, the owners of the floating property will like it all right, or rather the owners of the vessels that are classed up will, but what about the other fellows? The "I will" of Chicago is capable of bringing anything to a culmination, and this latest phase, or innovation, of shippers forcing up the class and rating of vessels so that they may have an abundance of tonnage to choose from, is a Chicagoan move of the first water. Buffalo, Cleveland or Detroit couldn't have encompassed so advantageous a project, but Chicago, with the utmost sang froid imaginable, also with the "I will" of its municipal motto, can beautifully play battledore and shuttlecock with any man's floating property, and rate or disrate, with a charming and successful simplicity, too actually cute for all orthodox rules, customs and regulations to bear up against, at least, no attention is paid to precedents or prevailing laws, but in the language of, and according to the ethics of the Medes and Persians, "we become a law unto ourselves" when it suits us to be so suited. The query will no doubt occur to many holders of floating property, where does the owner come in? what show does he have for his white ally in this telescoping of rating, insurance and classification of his property? We may whisper to such inquirers, the grand secret, that all they are called upon to do is to just foot bills, mail checks and everything else will be attended to, for them.—by the other fellows!

WRECKING companies are still wriggling away at the stranded steamer Paris, although she has been abandoned by her late owners as a constructive total loss. Unlike the recent case of the stranded P. & O. steamer China, whose hull insurance was carried by her owners, the underwriters on the Paris are making a hard and determined struggle to partially recoup themselves for the tremendous monetary loss occasioned by the stranding of the Paris, and now all is fish that may come to their net. As the vessel has been abandoned for some time it is somewhat singular that Capt. Watkins and his late officers are still kept hovering about the wreck. The constructive, has now surely become an actual, loss. The foreign wrecking companies are no doubt working on Lloyd's stereotyped old form of contract, "no cure, no pay," at the same time, there are pickings enough, in and about the old tank, to meet all daily expenditures.

It appears that private firms are now issuing "blue books" and "red books." We had some sort of an indistinct idea that "blue books" were a sort of a government monopoly, something after the style of an ancient edition of our own Congressional Record. The British government fairly revels in and exfoliates, so to speak, in blue book issues, much in the same manner as they are strong on ultimatums and other dictatorial mannerisms, including a strict adherence to void and defunct "blue" laws, as viewed from the later light of civilization. The "yellow" book is a French, we think, but it ought to be a Chinese monopoly, and the "red," well! let's see, that ought to be Italian, a-la-cardinalat.

THAT international boundary line is bothering our Lake Erie fishermen a good deal these times. The Canadian patrol steamer Petrel is waltzing around in the vicinity of the line of demarkation, and, altogether different to the fishermen from this side of the border, she seems to know exactly where it is all the time. It is fortunate that the officers of the Petrel act in a sensible, sailor-like way (so different to the officials on shore, who are generally loaded down with a sense of their own importance and the insignificance of that of others, and so cheerily give one or two warnings before confiscating twine. We would suggest that the tug companies send a man out with a sextant occasionally and have him shoot the angles of the sun's altitude against the sky gazers on the Petrel. A few altitudes would keep the Petrel off all right and euchre that craft at her own game.

LAKE FREIGHTS.

The advance to \$1 on iron ore from the head of Lake Superior to Ohio ports, which set in on Friday last, has not been maintained, chartering has been done within the last few days at 90 cents, Marquette, 80 cents and 85 cents asked; 75 cents from Escanaba. The June shipments of ore, two and a half million tons, exceeding all former records and about 300,000 tons over that of the corresponding month a year ago, the total shipments for the season being 4¾ millions tons and 100,000 tons more than was carried last year. It is thought that the mines can't ship such large quantities in the future, as stock piles are being well cleaned up.

The 2¾ cent grain rate from Duluth to Buffalo, equal to \$1.02 on ore, is firm, and there has been talk of a 3 cent rate since Monday. The Chicago rate is holding steady at 2 cents on corn to Buffalo, with brisk chartering. The all-rail competition is declining. Toledo to Buffalo 1½ cents on wheat.

Coal cargoes are plentiful at the long looked for rates of 50 cents Lake Michigan, and 40 cents to the head of Lake Superior from Ohio ports. Minor ports at increasing rates. The Buffalo rates on anthracite are the same as above.

Lumber carrying vessels are in good demand in all trades. Rates have been \$2 from Duluth since the opening of navigation. Some charters were made early in the season whereby a certain fleet was to take 40,000,000 feet Duluth to Lake Erie at \$1.87½. A charter Duluth to Cleveland was made a few days ago at \$2.25, but this load is said to consist of about two-thirds lath and one-third lumber.

LAKE FOG REPORT.

(By Norman B. Conger, Local Forecast Official and Marine Agent.)

Since date of last report, 813 reports of the prevalence of fog on the Great Lakes have been received. There was much fog on Lakes Superior, Huron and Michigan, but very little on Erie and Ontario. On Lake Superior fog was generally reported on twenty-four out of the thirty-one days under consideration; no fog was reported from May 19 to 23 inclusive, and on June 9 and 10. On Lake Michigan no fog was reported May 18 to 23 and June 1, 2, 8, 9 and 10; and on Huron on May 19, 20, 23 and 24, and on June 2, 3, 8, 9 and 10. In comparing these reports with the same period last year it appears that there was more fog reported on Lake Superior last season than this, about the same amount on Lake Michigan, less on Huron and about the same on Lakes Erie and Ontario. As has been before stated the heavy fog banks appear on the lake in the fairway of vessels, and do not extend, except in few cases, to the shore. The reports show that during general fog conditions heavy banks exist in most portions of the lake, with frequent intervals of clear weather. The records do not extend over a sufficient period, at the present time, to locate these banks accurately. No serious disasters to vessels were reported from fog conditions.

LAUNCH AT THE DAVIDSON YARD.

The large wooden schooner Matanzas will be launched from the yard of Capt. James Davidson, W. Bay City, Mich., on Saturday next, July 8, and it is expected that one week later, or, on July 15th, she will be ready to load her first cargo. Her dimensions are as follows: 355 feet long, 45½ feet beam, and 26 feet deep.

The Matanzas is a sister ship to the recently launched Santiago, is 2,600 gross tons and is classed A1* with a valuation of \$95,000. She has steel keelsons, arches, cords and diagonal strapped, equipped with steam windlass, deck hoisting engines, pumps and all the latest and most modern

improvements for this class of tonnage. These large, well built wooden vessels although carrying quite a good showing of canvas are designed in the main as tow barges, and while able to take care of themselves if cast adrift from the towing steamer, or when desiring to change ports to discharge or load part cargo, they are, as we have said, classed as lake barges, whether the name is exactly applicable or otherwise is another question.

There are several large repair and rebuilding jobs on hand at the Davidson yard, as well as the new lake tug now well in frame. The steamer Tampa ashore last fall on Lake Superior will be rebuilt as soon as work on the George B. Owen is completed.

ABSTRACT OF BIDS.

Abstract of proposals received at Duluth, Minn., for re-treatment work, Portage Lake ship canals, Mich., opened by Major Clinton B. Sears, Corps of Engineers, U. S. Army, July 1, 1899:

Name and address of Bidder.	Total.
Hugo & Tims, Duluth, Minn.....	\$132,273.50
Powell & Mitchell, Marquette, Mich.....	147,622.40
Collier-Weeks Co., New York, N. Y.....	155,113.80
Porter Bros., Duluth, Minn.....	144,201.20
Butler-Ryan Co, St. Paul, Minn.....	169,629.00
James B. Donnelly, Buffalo, N. Y.....	173,228.60

The firm of Hugo & Tims being the lowest responsible bidders, their proposals will probably be recommended to the Chief of Engineers, U. S. A., by Major C. B. Sears, for acceptance.

USONIAN.

Of course, we expect logic from a college professor, no one is waiting to hear wisdom drop from the lips of ordinary citizens, such as nine-tenths of us are. Hence, a St. Louis professor at the Washington University has discovered or just given to the public, a fact which he imagines may not have dawned upon the intelligence of the common herd up to this time.

It appears that we have been waiting to be discovered and properly labeled in consonance with the views and rules of the laws of the universe, this mundane sphere, (or is it spherical) or oblate spheroid. We now require a distinguishing signal among the world's families. It is said that old Chris. Columbus discovered the land, and we have just got through testing a few of our senses in heralding the anniversary day of our independence, and now, even at this late date, Professor Waterhouse wants to re-discover us. Well, having found the land, it is a good thing to discover the people who inhabit the same, and if there is one thing nicer than another, it is to be properly discovered.

However, we must now let the professor speak for himself as follows:

"At present there is no proper name that distinctively describes this country. Columbia and America apply to the whole western hemisphere. The people of Canada and Mexico, of Central and South America, are all Americans, and might justly resent the pretension which claims that title exclusively for the inhabitants of the United States of North America.

"The United States is an awkward expression. It is plural in form and singular in sense. It does not afford personal or adjective derivatives. United Statesmen and United Statesian are inadmissibly harsh. 'United States of North America' is an exact designation of this country. The first letters of these words form the word 'Usona.' This term is agreeable to the ear, singular in number and precise in definition. Its introduction would substitute for the incomplete United States an address so full and exact that no foreigner could misunderstand it.

"Formerly the press indicated that its general information was gathered from the four quarters of the globe by placing at the heads of its columns 'north, east, west, south.' From the initials of these words some assert that the term 'news' was derived.

"It is facetiously said that United States stands for 'Uncle Sam,' and this burlesque personification has found a permanent place in our language. The baptismal names of Generals Grant and Jackson have been supplanted by the universally used names which accident or valor gave.

"In fine, use can create and popularize new terms. Do not the words 'Usona' and 'Usonian' so fully subserve the needs of exact address and grammatical convenience as to deserve a place in our language? The press can, if it will, effect the adoption of these new words."

THE steamer Kaiser Friedrich, which was built for the North German Lloyd's Company, not having fulfilled the conditions of the contract, has been rejected by the company, and was returned to the builders on her arrival at Bremen from New York. There is a report that a new firm are ready to take over the discarded steamer.

CORRESPONDENCE.

We do not hold ourselves responsible in any way for the views or opinions expressed by our correspondents. It is our desire that all sides of any question affecting the interests or welfare of the lake marine should be fairly represented in THE MARINE RECORD.

MUST A FOREIGNER SERVE?

DETROIT, June 21, 1899.

To the Editor of the Marine Record:

DEAR SIR: Please inform me if I, being a foreigner, am liable to be called on to serve on a coroner's jury without pay. In all cases where remuneration is given, employment on juries, municipal work, etc., is barred to me, but in the case of a coroner's jury, where there is no pay, it is held by some authorities that a benighted foreigner is quite as capable as the free and enlightened citizen. If this be true, I ought to also have a chance at shoveling snow next winter. What does the RECORD say? COUSIN JACK.

RESCUING (?) CASTAWAYS.

TOLEDO, OHIO, July 5, 1899.

To the Editor of The Marine Record:

I have been a subscriber to the MARINE RECORD for several years, and I hold that it is the only publication that gives us the lake marine news all the year round. I would not miss an issue for anything, in fact, I look to keep posted on general current events through its columns.

In your issue of June 22d an excellent article is printed on the subject of a "Great Lakes Shipwreck and Humane Society," an institution which I think should have been in existence years ago, so that men who take risks in saving life and property would know and feel assured that their efforts would be appreciated by their fellow-men on shore.

I have talked to a number of marine men here about the recent loss of the Margaret Olwill on Lake Erie, and the opinions, while being various, yet in general they condemn the master of the steamer State of Ohio in his action at the time of finding wreckage and castaways floating around, and we would like to know how the RECORD regards the life-saving proclivities of Capt. Willoughby of the passenger steamer State of Ohio. Throwing a line to an exhausted and partly drowned castaway looks to me a good deal like fishing for sharks. Why couldn't some life buoys or a life raft have been drifted within his reach, if no one volunteered to man a boat? The steamer could easily have dropped her anchor in 10 or 12 fathoms of water and picked the man up at leisure, instead of throwing him a line and then seeing him drown alongside through sheer exhaustion. Our newspaper reports seem to award credit for such action but I can't see where it comes in. Of course a more vigorous or less worn out man was picked up later, but even then the steamer left the other three or four hollering their lungs out to attract attention, only to be picked up an hour or two afterwards by a ship's boat manned by an engineer and two deck officers. A proper inquiry should be made about this loss of life and credit given only where credit is due; one thing is certain, it would have been better for George Heffron if the passenger steamer had never sighted him, nor anyone but the man she picked up, and then Heffron would have been rescued an hour or two later by the boat from the Sacramento. Capt. Mansfield, the same as the others were.

The RECORD should deal with this matter in as outspoken a manner as it frequently does with other subjects and we know that you won't advocate only a common sense and shipshape way of rescuing castaways. J. T. H.

LOSS OF THE MARGARET OLWILL.

The wooden steamer Margaret Olwill, Capt. Brown, with stone from Kelly's Island to Cleveland, owned by L. P. & J. A. Smith, Cleveland, foundered off Lorain, O., in a north-east gale on Thursday last, with the loss of nine lives. The four survivors were picked up after being exposed on wreckage for several hours.

The Olwill, 554 gross tons, was built at Cleveland in 1887, and was a staunch, well equipped vessel. The loss recalls that of the schooner Nelson which foundered May 13 on Lake Superior with the loss of eight lives.

A SOCIETY has been formed in Berlin with the name of "Schiffbautechnische Gesellschaft", and its object is to bring together shipbuilders, marine engineers, shipowners, officers of the navy and mercantile marine, etc., for the discussion of practical questions connected with the science of shipbuilding.

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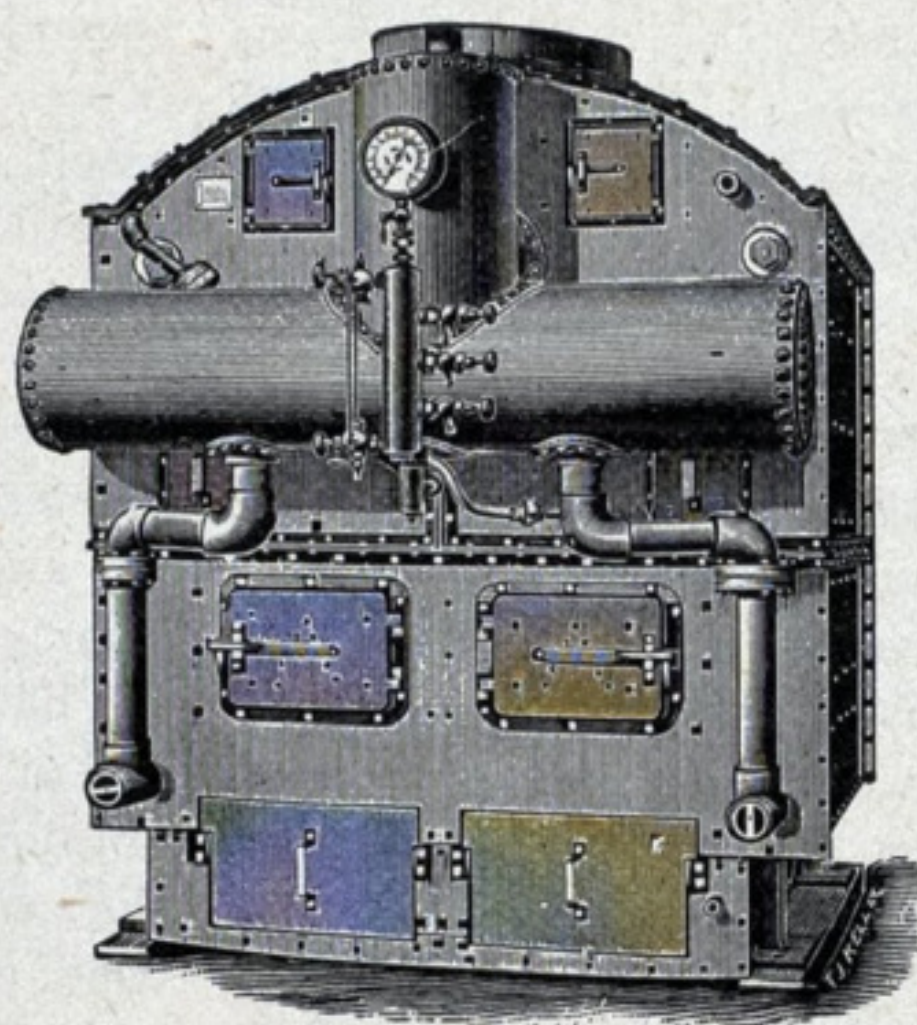
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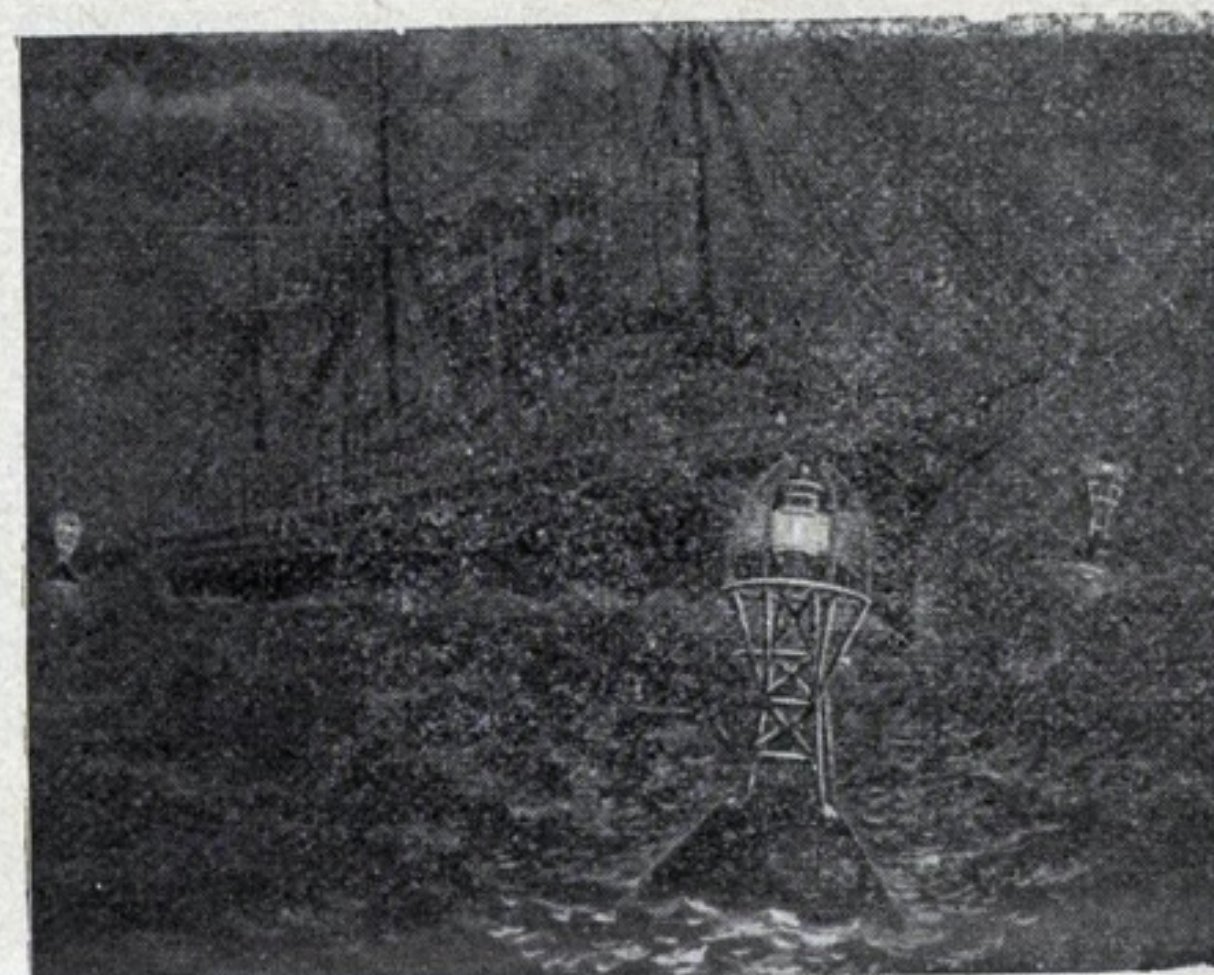
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UNITED STATES SHIPPING.

From an advanced report received by THE MARINE RECORD from Washington, the following particulars are gleaned:

The fiscal year which ended on Friday last was exceptional for the American merchant marine in several respects. Full reports will not be received by the Bureau of Navigation, Treasury Department, for several weeks, but returns already received warrant these statements.

The total output of American shipyards has been the largest of any year for the last quarter of a century except 1891, when 1,384 vessels of 369,302 gross tons were built and documented in the United States. During the past fiscal year the construction of merchant vessels, officially returned, has consisted of 1,429 vessels of 320,876 gross tons. Besides these 22 vessels of foreign construction, aggregating 30,181 gross tons, have been admitted to American registry, of which 10 were prizes captured during the war with Spain, 4 were steamships, aggregating 12,126 tons, admitted by special acts of Congress, and the remainder wrecked vessels, repaired in American shipyards. It is also reported from Manila that since last August, one hundred and forty-one vessels have been transferred from the hands of Spanish, German and British subjects to Americans, indicating the confidence of the business men of Manila in American government. The tonnage of these vessels has not yet been reported, and the transfer does not carry with it all the rights of American registry. Had the Senate passed the House bill for the registry of Hawaiian vessels, the total addition to our merchant fleet during the year would have reached nearly 400,000 tons. Our largest annual production was in 1855, when 2,027 vessels of 583,450 tons were built and documented.

During 1898 Great Britain built 1,549 vessels of 1,390,116 tons. The difference in the kind of vessels built is roughly disclosed by the average size, our construction averaging only about 225 tons, while the British averages 900 tons. Nearly all of our new tonnage is built to navigate in the coasting trade reserved to American vessels. The only steamships built directly for the foreign trade were the "Havana" and "Mexico" of the New York and Cuba Mail and the four "Admiral" steamships for Cuba and Jamaica, aggregating 19,750 tons, which were built under the postal

subsidy act. In anticipation of legislation at the coming session, however, construction has begun or been contracted for on about 100,000 tons of steel steamships for foreign trade and trade with Hawaii and Porto Rico, involving an expenditure of about \$15,000,000.

For the first time in our history on June 30, the total tonnage of our steam vessels, when tabulated, will exceed the total of all other kinds of documented vessels. During the year, however, 460 sail vessels of 96,458 tons have been built compared with 426 or 42,502 for the previous year, while the steam vessels built number 478 of 167,851 tons, compared with 448 of 110,128 for the previous year. In certain trades our large sailing vessels end avor to compete with foreign cargo steamships, and will doubtless continue to do so, at all events until the construction of the Nicaragua canal. The most notable vessel is doubtless the "John Smeaton," a steel schooner of 5,049 gross tons, built at West Superior, Michigan, probably the largest fore-and-aft vessel ever built. The largest sea-going sailing vessel built in Europe in 1898 was the "Ernest Siegfried" of Havre, 3,214 tons.

For the first time in our history, steel has become the principal material in our annual construction of rigged vessels, the steel tonnage for the year being 133,991 tons, wood 130,309 tons. Iron has ceased to be a shipbuilding material, only one vessel of 9 tons having been built of iron. During 1898 in Great Britain 99 per cent., or practically the whole construction except small fishing vessels, was of steel.

The additions to our seagoing fleet, including 30,181 tons foreign-built, referred to, were 166 vessels of 155,987 tons, divided into 50 steam vessels of 75,289 tons, 74 schooners of 62,906 tons, 10 square-rigged vessels of 12,428 tons, and 32 yachts of 5,364 tons, including the new cup defender. The square-rigged vessels are mainly for the foreign trade, and the schooners for coasting purposes or the trade with the British provinces and the West Indies.

There were built 491 unriggered vessels, barges, and canal-boats for Canadian or interstate trade, aggregating 56,567 tons. Excluding these the greatest increase has been on the Atlantic coast, the tonnage of rigged vessels built rising from 51,136 tons in 1898 to 134,352 tons for the past year, while on the Pacific there has been a decrease from 44,896 tons to 32,412 tons. The output of rigged vessels on the Great Lakes was 81,390 tons, compared with 45,211 during the fiscal year 1898.

JULY WEATHER.

The thanks of THE RECORD are due the Weather Bureau, Department of Agriculture, Washington, D. C., for duplicate copies of the meteorological chart of the Great Lakes, containing normal data for July.

Relative to storms and storm tracks for this month, Alfred J. Henry, Chief of Division, Weather Bureau, states as follows:

While the weather of summer is the least boisterous of the year there are yet occasional brief periods of treacherous squall winds that require the exercise of care and vigilance on the part of vessel masters. The element of danger in the squall winds lies not so much in their strength as in the sudden shift of the wind and the momentary violence experienced.

The Weather Bureau issues warnings to vessel men whenever the conditions threaten severe thunderstorms and squally weather. These warnings may be ably supplemented by the masters themselves in observing the state of the sky, especially during the afternoon. Thunderstorms and squall winds almost invariably occur with a falling barometer; the winds are generally light and from a southerly quarter. The shift of the wind precedes the storm cloud and rain by a few minutes.

The color of the storm cloud and its height above the surface of the lake quite often afford a measure of its violence. Thus, storm clouds of a dark green or olive color, especially when flying near the surface of the lake or ground, indicate severe squall winds.

EXEMPT FROM CAPTURE.

The peace conference now in session at The Hague, can only result in an interchange of national opinions, yet, ultimately some good may come out of it, as the following proposal, submitted by the United States delegates and now under consideration, would indicate. "Private property of all the citizens or subjects of the signatory powers, with the exception of contraband of war, shall be exempt from capture or seizure on the high seas or elsewhere by the armed vessels or by the military forces of any of the said signatory powers, but nothing herein contained shall extend the exemption from seizure to vessels and their cargoes which may attempt to enter a port blockaded by the naval forces of any said powers."

SLAG—PORTLAND CEMENT.

Our esteemed contemporary, the Engineering Record, in its issue of June 24th, publishes under the above heading, a dissertation on slag cements which it appears is contributed by a gentleman unconnected with that industry, but who is disposed to champion its cause.

He begins by defining Portland cement, and his definition may pass, although he suggests that the old style Portland made from burnt lime by aspdin is different from the modern once-fired kind. The difference, however, is only superficial, both are true Portlands, only the former kind must be kept very low in lime, and hence has gone out of fashion.

He then proceeds to show that because slag cement is chemically something like the foregoing, it must be the same, and is, therefore, also a Portland. His deduction is similar to that made by those who prove on paper that coals and diamonds are exactly the same. If we take 2 loaves of bread similar in composition, but one containing ¼ oz of arsenic, are we to believe that both are equally suitable for food? yet that just represents the difference between Portland and slag cements, pretty much alike generally but in one vital point widely different, and that one point puts slag out of court.

For the rest he is fair dealing enough, he admits that foreign slag cements have been for years deteriorating in reputation. But he surely cannot think we are going to succeed in traversing natural laws any more than the foreigner?

His information as to the excellent results obtained by American slag makers is so unlike ours that we must pass that over. If, however, we had given the experience of the U. S. government with some of the material he recommends, it would have proved interesting reading.

He admits that slag cement has under 7 per cent. of sulphur, magnesia and alkalies which represents about three times the quantity of sulphur and magnesia permissible in any cement claiming the designation of Portland.

He finally enquires whether a cement testing 500 lbs. at 7 days may not be considered good. It may or it may not; if its chemical analysis indicates an article with an excess amount of sulphur and magnesia, it certainly is not a good cement. He evidently doesn't know that the strength of a cement can be run up very high for a while by a liberal allowance of sulphur, and can also stand all kinds of tests beautifully. But it is only a question of time till the disintegrating factors get their work in and the cement goes to pieces, unless, as we observed in dealing with the same subject recently, it be a sulphide cement kept entirely in water.

It is recorded by Herodotus that at the building of the great pyramid a cement of inferior quality was worked off on the builders by an official who had some relations with the parties who quarried and burnt the cement. But it fell out one day that the King got hold of the actual tests of the cement and found they were of about one half of what the

official had certified their strength to be. Therefore, it came to pass, that he was incontinently strangled and his body thrown to the crocodiles. The priests could not tell the traveler what possible object the king's officer had in overstating his results, and so it remains a mystery to this day. Perhaps modern Egyptian investigators may afford some light on the matter.

For ourselves we can only repeat in a word what we have recently explained fully and clearly to our readers, slag cement is not Portland nor can it be made use of as a reliable substitute, nor is slag advisable for brick making; but with its sulphur diluted by the new carbon process lately described in these columns, slag will make a cement mortar similar to Portland cement mortar, with greater adhesive and plastic qualities and often at one half to two thirds the cost.

BIDS FOR GOVERNMENT WORK.

The bids opened by Colonel Jared A. Smith, Corps of Engineers, U. S. Army, on June 30th, for dredging in Straight Channel through Maumee River and bay and for constructing the dike between Turn Out Channels, at Toledo, O., were in the totals as follows:

Carkin, Stickney & Cram, Detroit	\$673,992.80
James Rooney, Toledo	577,418.00
Jas. P. Donnelly, Buffalo	603,493.00
L. P. and J. A. Smith Co., Cleveland	571,156.00
Morris & Cummings Dredging Co., N. Y.	650,924.00
The Buffalo Dredging Co., Buffalo	614,076.00
Edward J. Hingston, Buffalo	584,698.40
Lydon & Drews Co., Chicago	479,443.50
Atlantic, Gulf & Pacific Co., N. Y.	638,680.00
G. H. Breyman & Bros., Toledo	488,588.00

The lowest responsible bidders are Lydon & Drews Co., Chicago, and the highest, Carkin, Stickney & Cram, Detroit, there being a difference in the totals of these bids amounting to \$194,549 on this half-million dollar contract.

THE Siberian Railway, say the London Economist, will be 3,958 miles long, made up as follows; Western Siberia 888 miles; Central Siberia 1,149 miles; Trans-baikal, 737 miles; Eastern Chinese, through Manchuria, 1,000 miles; Ussuri Railway to Vladivostock, 141 miles. But to this total of 3,958 miles must be added 1,724 miles from Tsche-liabinsk to St. Petersburg; or 1,823 miles to Riga; or 2,037 miles to Libau. The Economist says that the railway tariff from Vladivostock to one of the Baltic ports could hardly be less than 8 to 10s per cwt. of 112 pounds. As the water rate from Chinese and Japanese ports is now much lower than this, the Economist believes that there is little possibility of any destructive tariff competition with the railway completed, but it thinks that the agriculture and mining developed along the line will give the railway plenty of work.

NOTES.

THE Falls Hollow Staybolt Co., Cuyahoga Falls, O., have their works in full operation, turning out safety hollow stay-bolt iron, manufactured in steel as well as charcoal iron. They are now working on an order for two car loads of steel hollow bolts for the Harlan & Hollingsworth Ship Building Co., Wilmington, Del., and orders are being regularly shipped to the leading railroad companies as well as to the majority of the principal marine industries and locomotive builders.

OVER five billion gallons of petroleum are now produced annually in the world. Of this amount two and one-half billions are produced in the United States, two and one-fourth billions in Russia, and the remainder is distributed among a dozen countries, Austria producing 87 million, Sumatra 72 million, Java 30 million, Canada 29 million, Roumania 24 million, India 15 million, Japan 8 million, Germany 7 million, Peru 3 million, and Italy about one million gallons.

A PITTSBURG dispatch states that the Carnegie Steel Company has contracted to deliver to Russia within 26 months 180,000 tons of steel rails. It is safe to say, the despatch continues, that the price is not less than \$25 per ton, thus making the aggregate amount of the order four and a half million dollars. The rails are intended for use on Russian railways in Siberia and China. Taking the 80 lb rail as the standard the contract means that the Carnegie Company will supply 1,300 miles of lines, but a lighter rail will probably be used, thus greatly increasing the mileage.

THE following named new vessels have gone into service during the past month: Pennsylvania, side-wheel passenger steamer, 747 gross tons built at Wyandotte, Mich., for the Erie & Buffalo Steamboat Co., valued at \$160,000. Tow-barges, Manila, 5,039 tons, built at South Chicago to the order of the Minnesota Steamship Co., and hailing from Ashtabula, valued at \$175,000; John Smeaton, 5,049 tons, built at W. Superior for the Bessemer Steamship Co., and hailing from Duluth, also valued at \$175,000, and the wooden barge Santiago, 2,600 tons, built at West Bay City, by James Davidson and on builder's account, her valuation is given as \$95,000.

THE census report for 1900 of the Great Lake fisheries is expected to contain surprises in respect to the extension of the fisheries during the last ten years in the Great Lakes of Superior, Michigan, Huron, Erie, and Ontario. From 1880 to 1890 the number of fisherman actually engaged in these waters increased 53 per cent. The capital invested during the same period increased 110 per cent., and the fish taken increased from 68,000,000 to 118,000,000 pounds, or 70 per cent. Lake Ontario was the only one to show a loss. In fact, the Great Lakes fisheries are now the fisheries of the Great Lakes to the west of Buffalo, and Lake Ontario is no longer a factor in the matter.

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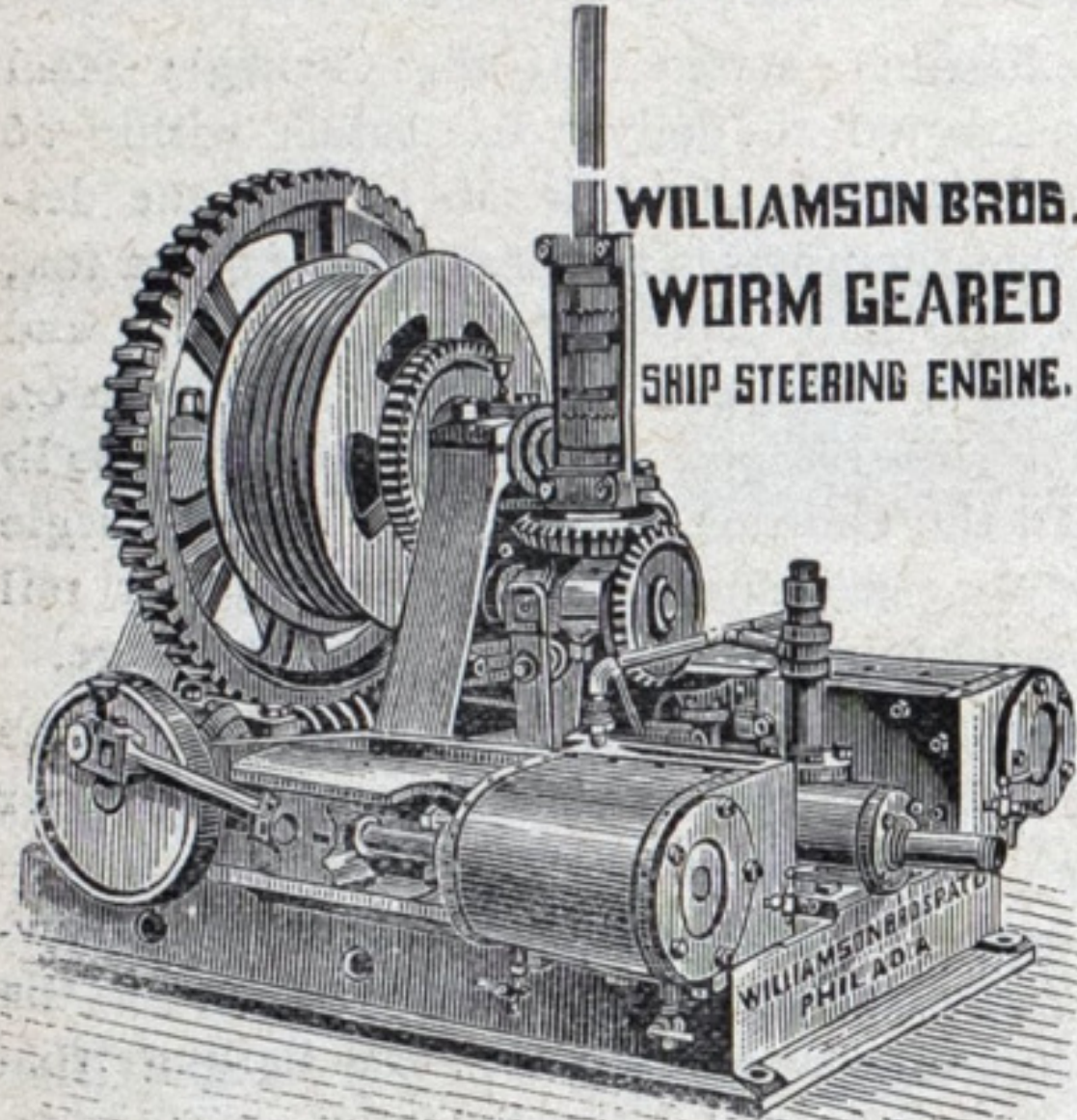
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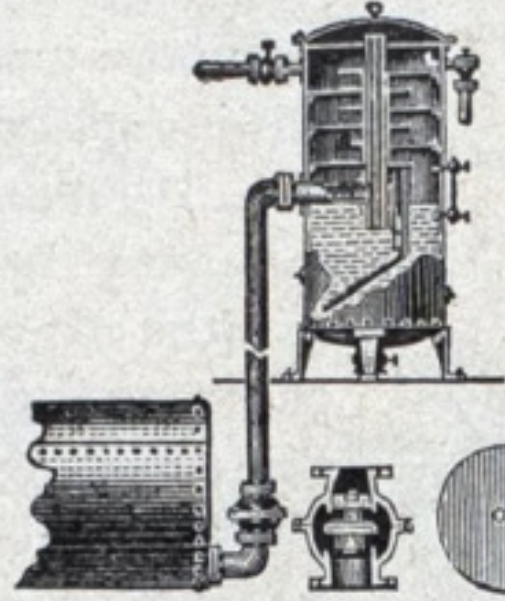
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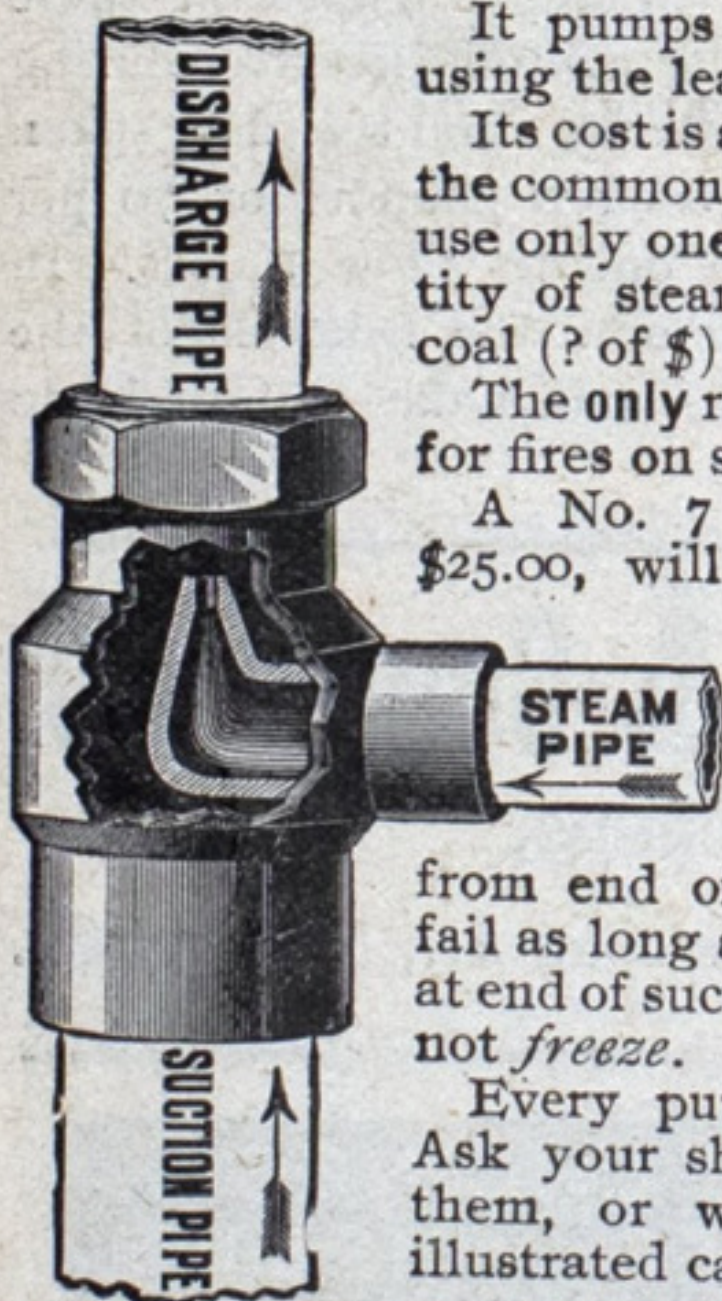
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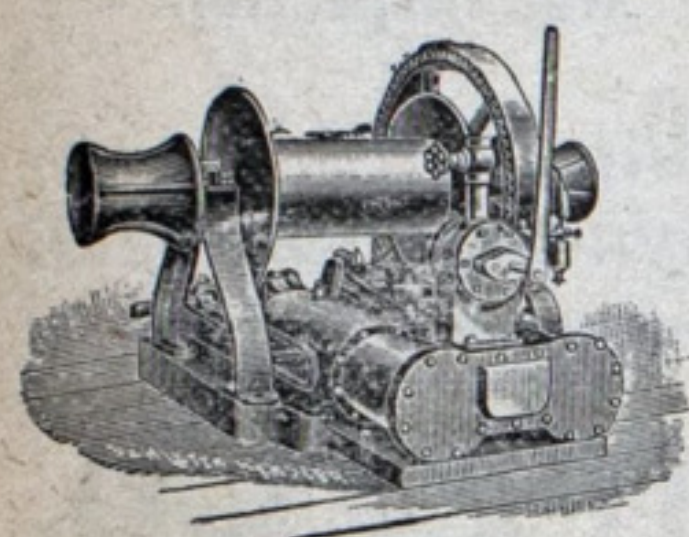
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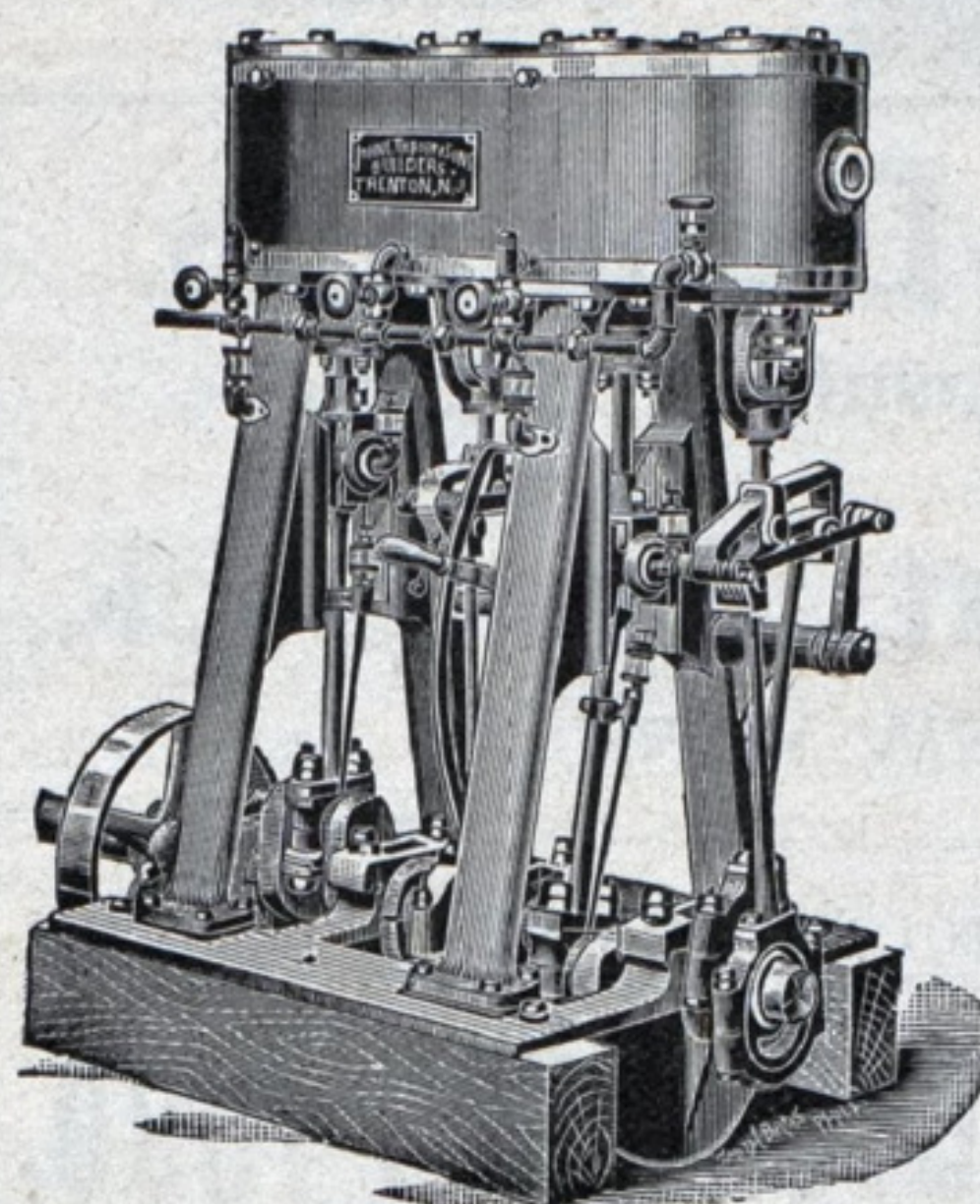
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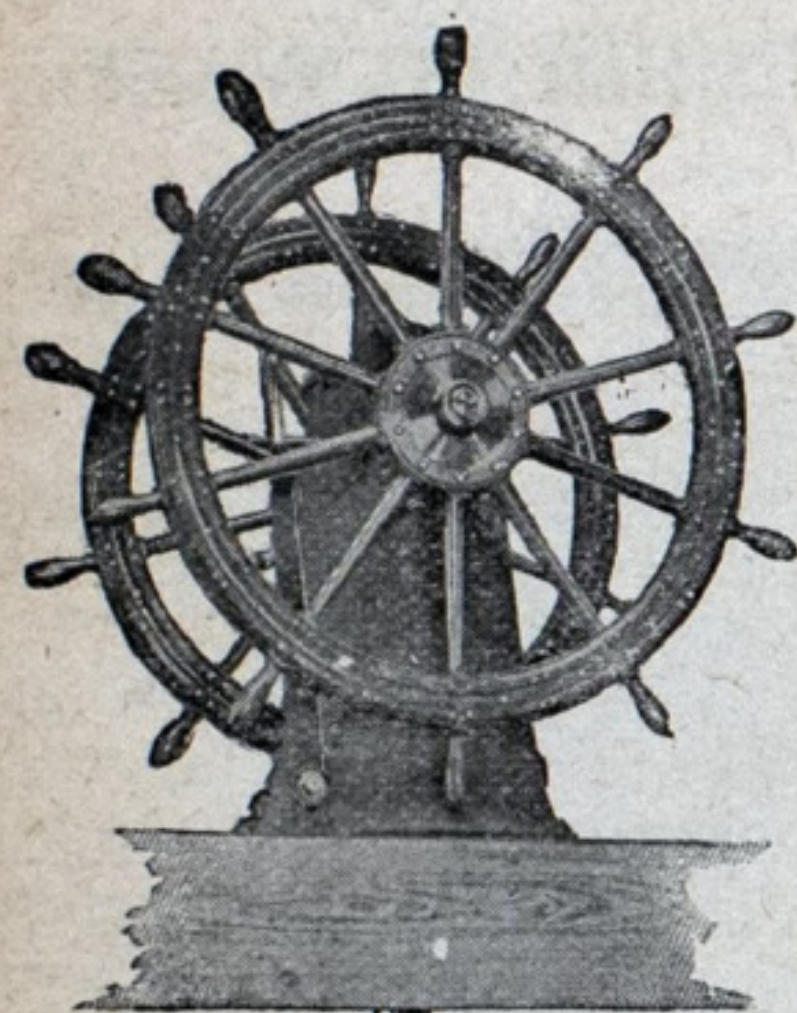
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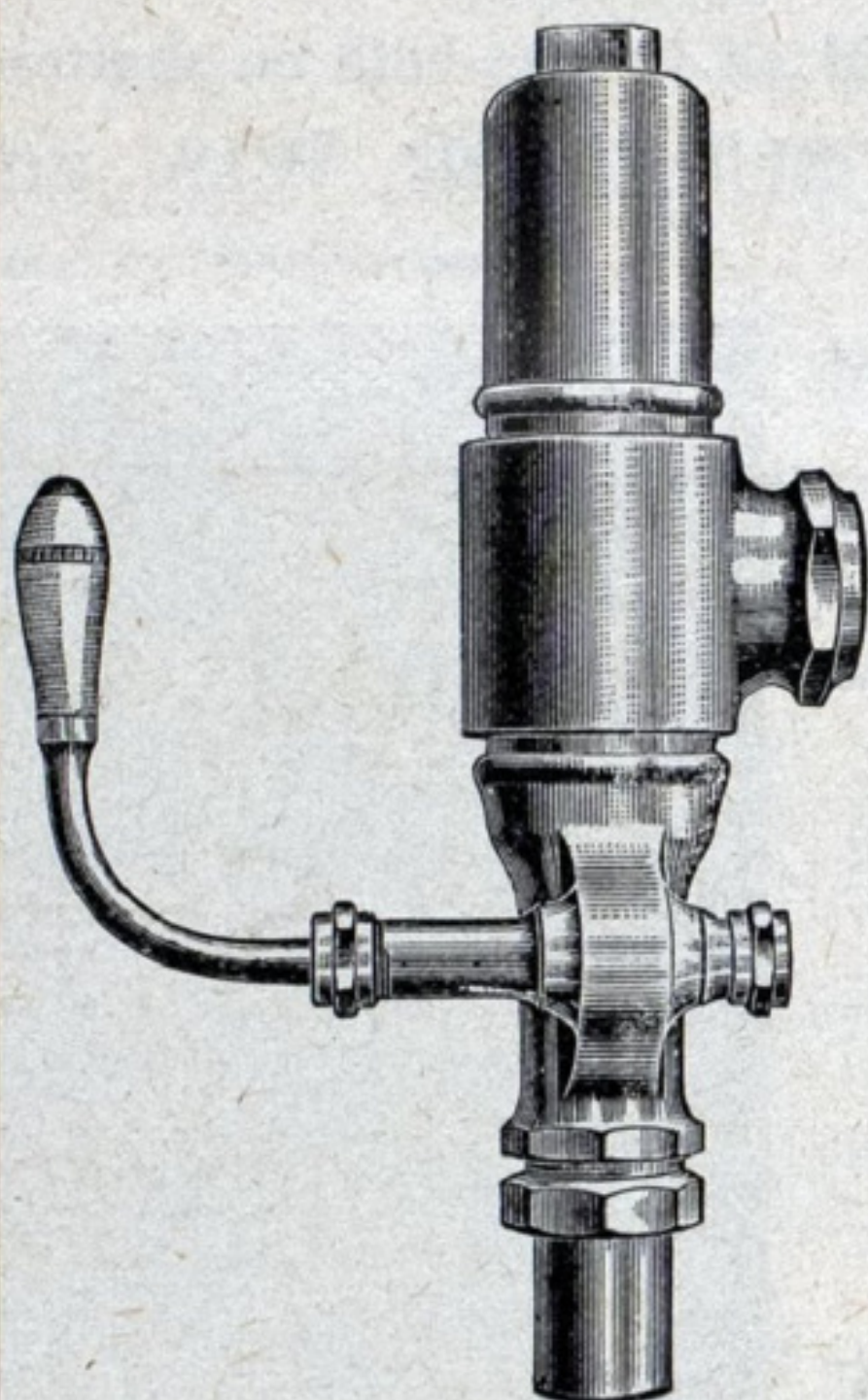
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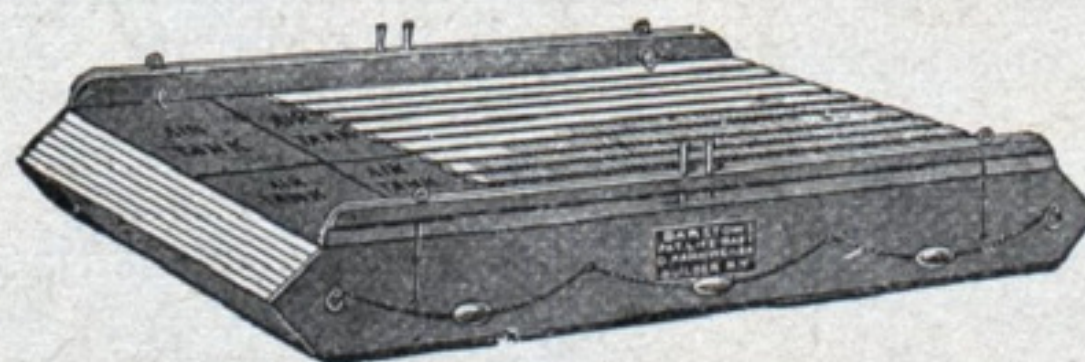
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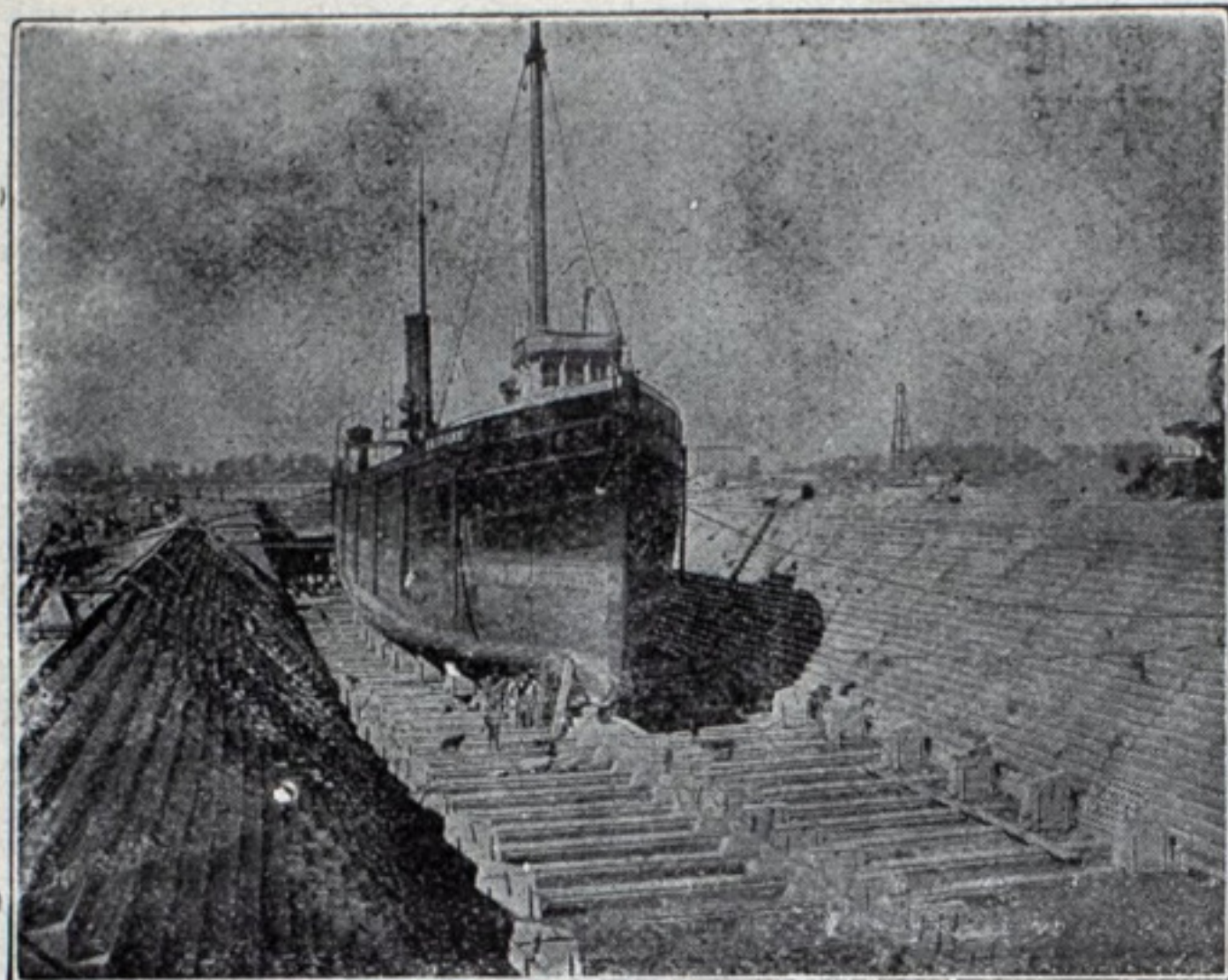
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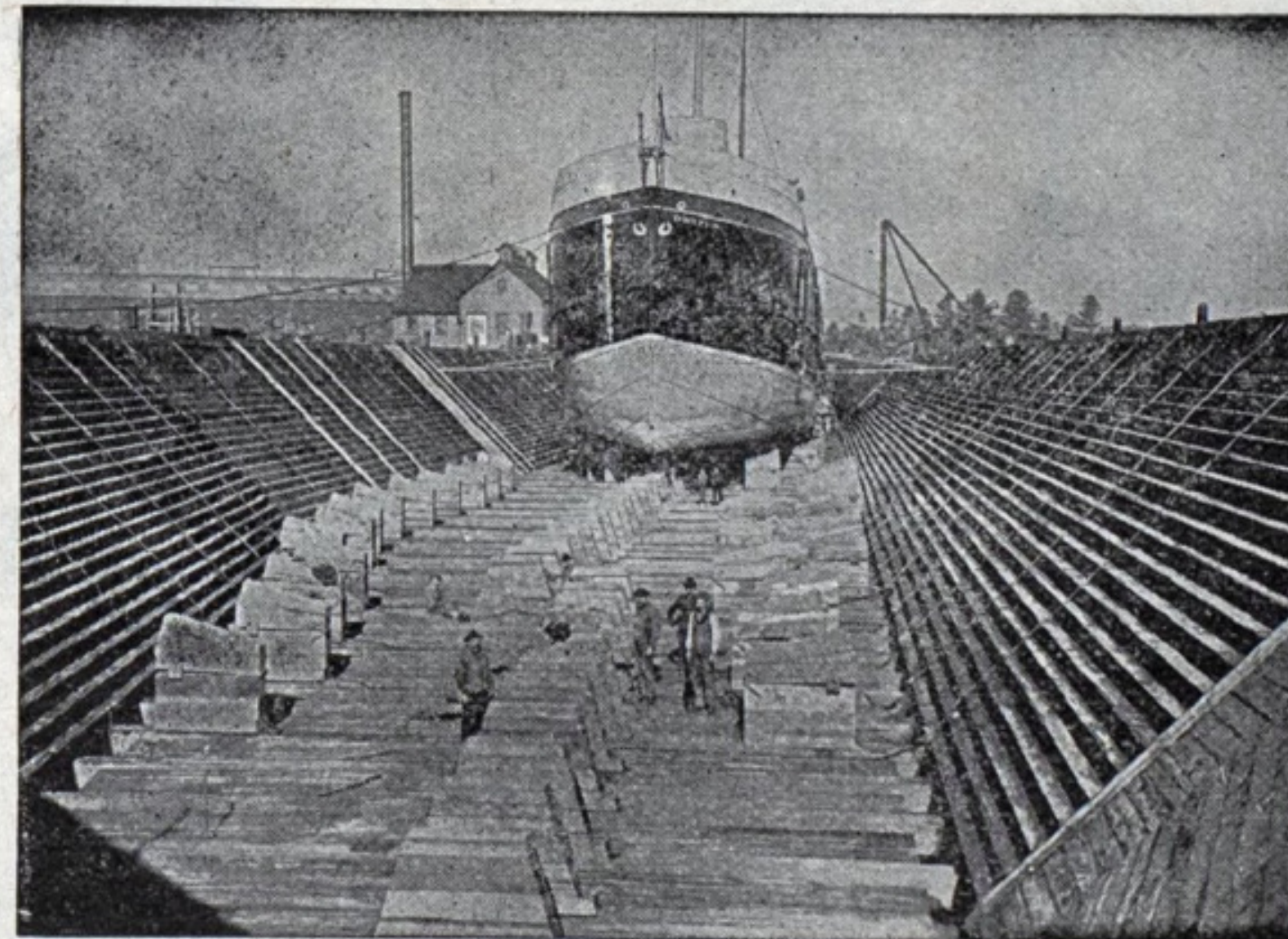
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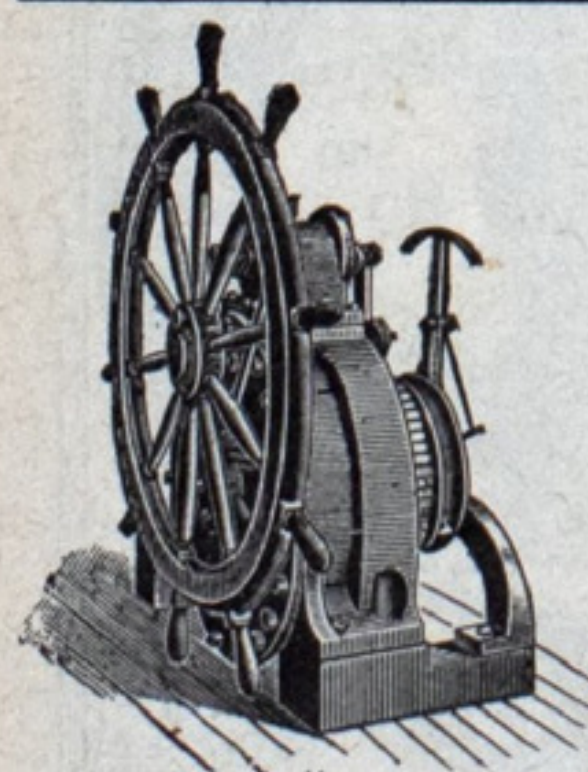
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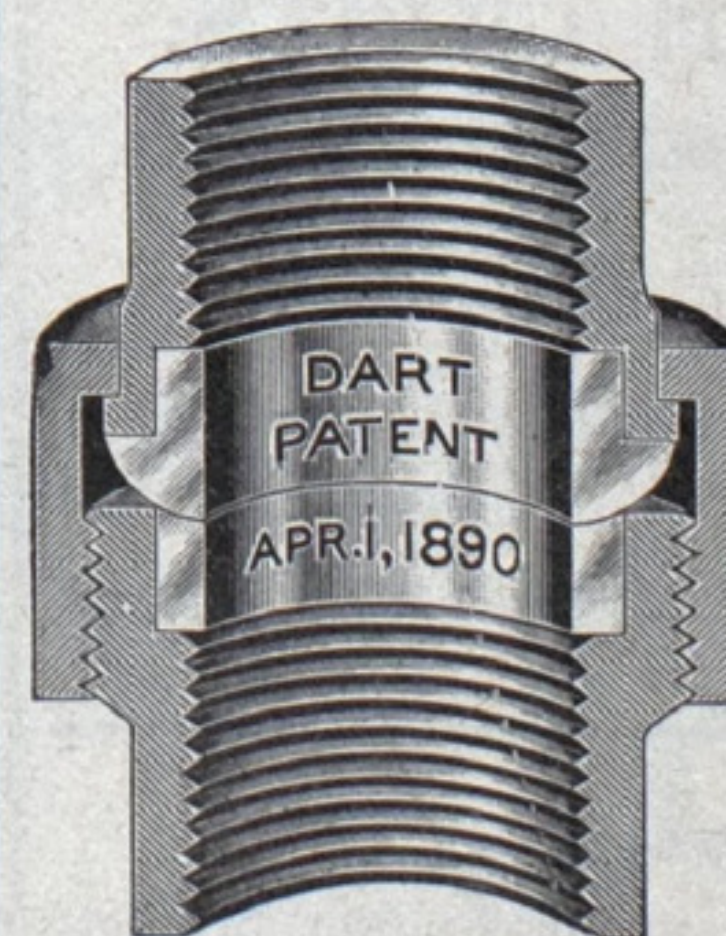
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